NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

THESIS

SYSTEMS APPROACH TO TERRORISM: COUNTERING THE TERRORIST TRAINING SUBSYSTEM

by

Erdogan Celebi

December 2006

Thesis Advisor:	Nancy Roberts
Second Reader:	Michael Freeman

Approved for public release; distribution is unlimited

THIS PAGE INTENTIONALLY LEFT BLANK

REPORT DOCUMENTATION PAGE		*Form Approved OMB No. 0704-0188*
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503.		
1. AGENCY USE ONLY *(Leave blank)*	**2. REPORT DATE** December 2006	**3. REPORT TYPE AND DATES COVERED** Master's Thesis
4. TITLE AND SUBTITLE: Systems Approach to Terrorism: Countering the Training Subsystem		**5. FUNDING NUMBERS**
6. AUTHOR: Erdogan Celebi		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000		**8. PERFORMING ORGANIZATION REPORT NUMBER**
9. SPONSORING /MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A		**10. SPONSORING/MONITORING AGENCY REPORT NUMBER**
11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government.		
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release, distribution is unlimited		**12b. DISTRIBUTION CODE** A

13. ABSTRACT

This study on terrorism training follows the logic that terrorism is a "wicked problem" and there are various strategies to cope with it. Systems thinking is one of the coping strategies to address "wicked problems." A system is a whole composed of complex organized elements (subsystems) interacting with each other and with their environment. The stability of a system depends on its components' alignment. Misaligning one of its components, will destabilize, or even disrupt the whole system. In this regard, the study defines terrorism and terrorist organizations in systems terms, explains their components and interrelations, and concludes that the most important component of a terrorist system is the training subsystem. Thus it is important to understand how the subsystem functions in order to disrupt the whole system.

The study reviews the types of terrorist training, how the terrorists and their organizations learn (process), what the terrorists learn (content), where the terrorists learn (location) and concludes that the internet is the new safe haven for terrorist training. It also demonstrates the adaptive capability of terrorist system moving from land-based to internet-based training. Almost every terrorist organization on the US Sate Department's designated terrorist organizations list exists on the Net. One example is the PKK (Kurdistan Workers Party) terrorist network. Its website network is analyzed by content and network structure using social network analysis software UCINET. The goal is to develop strategies to eliminate the web presence of the terrorist training subsystem.

14. SUBJECT TERMS: Terrorism, Terrorist Systems, Complex Adaptive Systems, Wicked Problems, Systems Approach, Terrorist Training, Terrorism on the Internet, PKK, Social Network Analysis			**15. NUMBER OF PAGES** 109
			16. PRICE CODE
17. SECURITY CLASSIFICATION OF REPORT Unclassified	**18. SECURITY CLASSIFICATION OF THIS PAGE** Unclassified	**19. SECURITY CLASSIFICATION OF ABSTRACT** Unclassified	**20. LIMITATION OF ABSTRACT** UL

i

THIS PAGE INTENTIONALLY LEFT BLANK

SYSTEMS APPROACH TO TERRORISM: COUNTERING THE TERRORIST TRAINING SUBSYSTEM

Erdogan Celebi
Captain, Turkish Army
B.S. in Systems Engineering, Turkish Military Academy, 1997

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN DEFENSE ANALYSES

from the

NAVAL POSTGRADUATE SCHOOL
December 2006

Author: Erdogan Celebi

Approved by: Nancy Roberts
               Thesis Advisor

               Michael Freeman
               Second Reader

               Gordon McCormick
               Chairman, Department of Defense Analyses

iii

THIS PAGE INTENTIONALLY LEFT BLANK

ABSTRACT

This study on terrorism training follows the logic that terrorism is a "wicked problem" and there are various strategies to cope with it. Systems thinking is one of the coping strategies to address "wicked problems." A system is a whole composed of complex organized elements (subsystems) interacting with each other and with their environment. The stability of a system depends on its components' alignment. Misaligning one of its components, will destabilize, or even disrupt the whole system. In this regard, the study defines terrorism and terrorist organizations in systems terms, explains their components and interrelations, and concludes that the most important component of a terrorist system is the training subsystem. Thus it is important to understand how the subsystem functions in order to disrupt the whole system.

The study reviews the types of terrorist training, how the terrorists and their organizations learn (process), what the terrorists learn (content), where the terrorists learn (location) and concludes that the internet is the new safe haven for terrorist training. It also demonstrates the adaptive capability of terrorist system moving from land-based to internet-based training. Almost every terrorist organization on the U.S. Sate Department's designated terrorist organizations list exists on the Net. One example is the PKK (Kurdistan Workers Party) terrorist network. Its website network is analyzed by content and network structure using social network analysis software UCINET. The goal is to develop strategies to eliminate the web presence of the terrorist training subsystem.

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

LIST OF FIGURES

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF TABLES

THIS PAGE INTENTIONALLY LEFT BLANK

ACKNOWLEDGMENTS

THIS PAGE INTENTIONALLY LEFT BLANK

EXECUTIVE SUMMARY

This study on the terrorism training will follow logic that terrorism is a "wicked problem" and there are various strategies to cope with it. Systems thinking is one of the coping strategies. A system is a whole composed of complex organized elements (sub systems) interacting with each other and with their environment. The stability of a system depends on its components' alignment. If we misalign one of its components, we can destabilize even disrupt the whole system. Thus, the structure of the study is as follows:

Chapter I explains why terrorism is a wicked problem by demonstrating that terrorism has all the basic characteristics of wicked problems. Chapter I also provides an overview of the coping strategies of "wicked problems" and chooses a systems approach to deal with the wicked problem of terrorism.

Chapter II defines terrorism and terrorist organizations in systems terms, explains its components and interrelations among these components, and concludes that the most important component of the system is the training subsystem. Thus, our goal is to understand how the terrorist training subsystem functions.

Chapter III focuses on the training subsystem, identifies the types of terrorist training, how the terrorists and their organizations learn (process), what the terrorists learn (content) and where the terrorists learn (location). It concludes that internet is the new safe haven for terrorist training demonstrating the adaptive capability of terrorist system moving from land-based to the Internet based-training.

Chapter IV explains how terrorists use the internet, especially in their training activities. It concludes that almost all the attention of counterterrorism efforts to counter terrorists on the net concentrate on the web-based use of internet. However, new technologies, introduced with the broadband internet, enable peer-to-peer connection. Thus, a more decentralized nature of peer-to-peer networks, which appears to be the new trend among terrorist networks, will make monitoring the communications in terrorist systems more difficult.

Chapter V examines how a terrorist system uses the internet, especially for motivational training of its current and prospected militants. Using social network

analysis, it analyzes the website network of PKK, a terrorist organization on United States' and European Union's designated terrorist organizations list.

Chapter VI concludes the study and gives some policy implications for coping with the wicked problem of terrorism.

THIS PAGE INTENTIONALLY LEFT BLANK

I.   INTRODUCTION

> Some Hindus had brought an elephant for exhibition and placed it in a dark house. Crowds of people were going into that dark place to see the beast. Finding that ocular inspection was impossible, each visitor felt it with his palm in the darkness. The palm of one fell on the trunk 'This creature is like a water-spout,' he said. The hand of another lighted on the elephant's ear. To him the beast was evidently like a fan. Another rubbed against its leg. 'I found the elephant's shape is like a pillar,' he said. Another laid his hand on its back. 'Certainly this elephant was like a throne,' he said.[1]

> *Rumi 1207-1273*

Almost no day passes without terror-related news published in the visual or printed media, be it a bloody plot, a threat, or a communiqué. Terror has infiltrated our daily life with the thorough inspections of our baggage at the airports, debates about monitoring our daily e-mail traffic, or discussions about the possibility of mushroom clouds over major cosmopolitan cities. People are the victims of bomb blasts in commuter trains, in public buses, in shopping malls or even at children's parks[2], in some countries which are more susceptible to terrorism.

Scientists have been trying to explain terrorism for a long time, and after 9/11, these studies proliferated due to the importance of the subject as well as interest among people all over the world who witness the change of its scope in terms of lethality and the ongoing global war on terrorism.

A.   DEFINING TERRORISM: AN ELEPHANT IN THE DARKNESS

Terrorism is not an easy subject to conceptualize, and debates on the definition of terrorism are the indicator of this hardship. Terrorism expert Alex Schmid gives five frameworks to view terrorism: "terrorism as a crime," "terrorism as warfare," "terrorism as political violence," "terrorism as religious zealotry," and "terrorism as

---

[1] Jalal al-Din Rumi translated by A.J. Arberry, "Tales from Masnavi," available at http://www.khamush.com/tales_from_masnavi.htm#The%20Elephant accessed on 16 September 2006

[2] "Bomb Blast kill seven, wounds 17 in Turkey," *Reuters*, 12 September 2006, available at http://go.reuters.com/newsArticle.jhtml?type=worldNews&storyID=13467062&src=rss/worldNews

communication."[3] These frameworks are also the lenses through which people define the problem. The way that states, organizations or integrated structures like United Nations define terrorism, and the concepts related to it, demonstrates how they perceive the threat and what measures they should take to defeat it. For example, Article 1 of the 1991 Anti-Terror Law of Turkey defines terrorism as:

> Any act committed by an individual or individuals belonging to an organization with a view to change the constitutionally determined characteristics of the Republic and the political, legal, social, secular and economic order through oppression, violence, intimidation or threat; to destroy the indivisible territorial and national integrity of the State or to endanger the existence of the Turkish State and Republic; to weaken or take over the state authority; to suppress the fundamental rights and freedoms; to disrupt the domestic or external security as well as public order and health, is an act of terror.[4]

In another study, Schmid complied 109 scholarly articles that define terrorism, and listed the definitional elements according to their frequency mentioned in different definitions in descending order.

Element	Frequency
Violence, force	83.5%
Political	65%
Threat	51%
(Psych.)effects and (anticipated) reactions	41.5%
Purposive, planned, systematic, organized action	32%
Method of combat, strategy, tactic	30.5%
Extra normality, in breach of accepted rules, without humanitarian constraints	30%
Coercion, extortion, induction of compliance	28%

---

[3] Alex P. Schmid, "Five Frameworks for Conceptualizing the Terrorism," *Terrorism and Political Violence,* 16 (2006): p.197-221

[4] "Anti-Terror Law No 3713," *Official Gazette*, No 20843 vol. 30, 12 April 1991, cited in Beril Dedeoglu, "Bermuda Triangle: Comparing Official Definitions of Terrorist Activity," *Terrorism and Political Violence*, 15 (2004): p. 100

Publicity aspect	21.5%
Arbitrariness; impersonal, random character; indiscrimination	21%
Civilians, noncombatants, neutral, outsiders as victims	17.5%
Intimidation	17%
Innocence of victims emphasized	15.5%
Group, movement, organization as perpetrator	14%
Symbolic aspect, demonstrators to others	13.5%
Incalculability, unpredictability, unexpectedness of occurrence of violence	9%
Clandestine, covert nature	9%
Repetitiveness; serial or campaign character of violence	7%
Criminal	6%
Demands made on third parties	4%

Table 1 Frequencies of Definitional Elements in 109 Scholarly Definitions of Terrorism[5]

Using 16 elements out of 23 he defines terrorism broadly as:

Terrorism is an anxiety-inspiring method of repeated violent action, employed by (semi)clandestine individual, group, or state actors, for idiosyncratic, criminal, or political reasons, whereby—in contrast to assassination—the direct targets of violence are generally chosen randomly (targets of opportunity) or selectively (representative or symbolic targets) from a target population, and serve as a message generators. Threat- and violence based communication process between terrorist (organization), (imperiled) victims, and main targets are used to manipulate the main target (audiences), turning it into a target of demands, or a target of attention, depending on whether intimidation, coercion or propaganda is primarily sought.[6]

As observed from the differences between the broadest definitions of terrorism by Schmid—that tried to include almost every scholarly element related to terrorism—and the Turkish Anti-Terror Law definition, every country defines it according to their unique concerns. Threats to constitutionally determined characteristics of the Turkish Republic

---

[5] Alex P. Schmid and Albert Jongman, *Political Terrorism: a new guide to actors, authors, concepts, data bases, theories, & literature* (New Jersey: Transaction Publishers, 2005), p.36

[6]Ibid. p.39

(democratic, secular and social state governed by the rule of law[7]), indivisible territorial and national integrity, and state authority are viewed as vital elements for defining terrorist acts in Turkey, whereas the U.S. administration defines it more generally as "premeditated, politically motivated violence against innocents" in its 2002 *The National Security Strategy*.[8] That is to say, perceptions of terrorism in Turkey and in the US are different, in addition to many other different views within these countries.

B.   TERRORISM AS A WICKED PROBLEM

The length of the Schmid's definition and the variety of its elements indicates that terrorism, the most dangerous threat to world's security today, is a subject that is related to various disciplines such as political science, organizational theory, psychology, sociology, law, criminology, military, computer science, systems analysis and so on. The involvement of people with different concerns, as victims or perpetrators, as supporters or opposition, as policy makers or policy implementers, adds to its social complexity. Stakeholders are not only individuals but organizations and countries at the macro level. Its existence from the very beginning of the recorded history—beginning with the Zealots in Roman Empire era, Assassins in 12th century, Anarchists in 19th century, Nationalists in 20th century and various factions today ranging from religious extremists to ethnic nationalists[9]-- reveals that terrorism has no simple, prescribed solution. Moreover, studies show that some solutions implemented by various countries in the past have had a reverse effect and caused more problems than it solved. All these indications reveal that terrorism is a "wicked problem," because it fits almost all the characteristics of the wicked problems.

1.   Characteristics of Wicked Problems

Drawing from Rittel Horst, and Melvin Weber (1973), Naval Post Graduate School's Nancy Roberts identifies basic characteristics of wicked problems:

---

[7] "Characteristics of the Republic," Turkish Constitution article 2, available at http://www.tbmm.gov.tr/english/constitution.htm accessed 15 October 2006

[8] White House, "The National Security Strategy 2002," p.5 available at http://www.whitehouse.gov/nsc/nss/2002/nss3.html accessed 18 October 2006

[9] Robert A. Pape, *Dying to Win: Thee Strategic Logic of Suicide Terrorism*, (New York: Random House, 2005), 11- 16

- There is no single definition of a "wicked problem."

- Underlying factors giving rise to a "wicked problem" are complex and intertwined, and little things may make huge differences (butterfly effect: cause of a tornado in pacific may be a butterfly flapping its wings in China)

- "Wicked problems" have no stopping rule (it is always possible to produce a 'better' solution).

- Solutions to "wicked problems" are not true or false but good or bad. Stakeholders' judgments are likely to differ widely in accord with their group or personal interest, their special value-sets, and their ideological partiality. Their assessments of proposed solutions are expressed as 'good' or 'bad', or more likely 'better' or 'worse' or 'satisfying' or 'good enough'.

- There is no immediate and no ultimate test of a solution to a wicked problem.

- Every solution to a wicked problem is a 'one-shot' operation. Because there is no opportunity to learn by trial and error, every attempt counts significantly. Every implemented solution is consequential. It leaves traces that cannot be undone; there is no "undo" button. Solutions have irreversible consequences which affect many people's lives.

- Every wicked problem is unique.

- Every wicked problem can be considered to be a symptom of another problem.[10]

Almost all these characteristics also apply to terrorism:

- There is no single definition of terrorism.

- There are plenty of studies about underlying causes of terrorism concluding that there may be various root causes ranging from poverty to lack of political representation.

- Every country tries to find a better solution for terrorism in accord with the stakeholder's interests that are concerned with terrorism and their value sets.

- The steps attempting to solve problem of terrorism have irreversible consequences which affect people's lives, especially in oppressive regimes.

---

[10] Nancy Roberts, Course lecture on Coping with the Wicked Problems at NPS, October 2006; Rittel, Horst, and Melvin Weber, "Dilemmas in General Theory of Planning," *Policy Sciences,* 4 (Amsterdam: Elsevier Scientific Publishing, 1973) p.155-159

- No solution to terrorism can be said to be the best.

- Terrorism should be examined in context of conditions that are unique to the context in question.

- The solutions implemented to solve the problem of terrorism may cause even greater problems.

2.   Taming Strategies for Wicked Problems

There are several ways for taming (attempting to solve) wicked problems, according to Jeff Conklin:

1. Lock down the problem definition. Develop a description of a related problem or a sub-problem that you *can* solve, and declare that to be the problem. Resist all efforts to expand or modify the problem definition.

2. Assert that the problem is solved. Since a wicked problem has no definitive solution, the whole point of attempting to tame it is so that a solution can be reached

3. Specify objective parameters by which to measure the solution's success. This is the measurement approach.

4. Cast the problem as "just like" a previous problem that has been solved. Ignore or filter out evidence that complicates the picture.

5. Give up on trying getting a good solution to the problem. Just follow orders, do your job, and try not to get in trouble.

6. Declare that there are just a few possible solutions, and focus on selecting from among these options. A specific way to do this is to frame the problem in "either/or" terms, e.g., "Should we attack Iraq or let the terrorists take over the world?"[11]

Taming strategies are not effective in dealing with wicked problems. They are piecemeal efforts that often have unintended consequences and make the wicked problems even worse. Rather than relying on taming strategies Roberts offers to take a systems approach as a way of coping with wicked problems.[12] This thesis follows that path and examines terrorism from a systems perspective.

---

[11] Jeff Conklin, "Wicked Problems and the Social Complexity," available at http://cognexus.org/wpf/wickedproblems.pdf accessed on 12 October 2006

[12] Nancy Roberts, "Coping with the Wicked Problems," class lecture at the NPS October 2006

C. OUTLINE OF THE THESIS

This study on terrorism training assumes that terrorism is a wicked problem and there are various strategies to cope with it. A systems approach is one of the coping strategies and it is the approach taken in this research. A system is a whole composed of complex organized elements (sub-systems) interacting with each other and with their environment. The stability of a system depends on its components' alignment. If one of its components is misaligned, it may be possible to destabilize or even disrupt the whole system. In terms of terrorism, subsystems of the terrorism are training subsystem, logistics subsystem, management subsystem and operational subsystem. Each of these components of the terrorist system is inter-dependent and functions to import inputs from the environment, process them, and export outputs to the environment again. These outputs are in the form of violent acts.

The counter terrorism measures today focus on misaligning operational, logistics or management subsystems. They attempt to find, capture or kill the terrorists and their leaders or cut the financial and logistical resources that feed the terrorist system. However, it is a simple mathematical rule that if these strategies do not kill or capture more than the terrorist system recruits, terrorism problems will grow. It is the training subsystem that recruits and equips the terrorists with motivation and skills to kill. This study takes the position that the training subsystem is the most critical component, because it imports the energy to the system—the people who are trained to be terrorists— and then enables the whole system to function. Thus, this research focuses on the training subsystem and structure of the study is as follows:

Chapter II defines terrorism and terrorist organizations in systems terms, explains the components and interrelations among the components, and concludes that the most important component of the system is the training subsystem. Thus, we should comprehend how the training subsystem can be understood in system terms.

Chapter III focuses on the training subsystem and explains the types of terrorist training, how the terrorists and their organizations learn (process), what the terrorists learn (content) and where the terrorists learn (location). This chapter concludes that the internet is the new safe haven for terrorist training, demonstrating the adaptive capability of terrorist system moving from land based to the internet-based training.

Chapter IV explains how terrorists use the internet, especially in their training activities, and discovers that much of the efforts to counter "terrorism-online" concentrate on web-based use of the internet. New technologies introduced with broadband internet enables peer-to-peer networks and may potent a new trend. The more decentralized nature of peer-to-peer networks makes monitoring internet more difficult; in addition, these new technologies create new opportunities for terrorist use. The chapter concludes that web presence of the terrorist networks should be stopped as their geographical presence is being destroyed.

Chapter V examines how a terrorist organization uses the internet especially for motivational training of its current and prospective militants. The chapter applies social network analysis to identify the web presence of the website network of terrorist PKK (Partiya Karkaren Kurdistan), a terrorist organization on the United States' and European Union's designated terrorist organizations list. It supports techniques to eliminate terrorist PKK's web presence.

Chapter VI concludes the study and recommends policy implications for coping with the wicked problem of terrorism.

II.   TERRORISM AS A SYSTEM

A.   INTRODUCTION

The open system framework comes from the "general system theory" of Ludwig von Bertalanffy in the 1940s. Daniel Katz and Robert Kahn introduced the open system theory in their seminal work, the *Social Psychology of Organizations*.[13] Since then this interdisciplinary framework of organizations replaced the old limited structural approach.

Open system theory views organizations as systems interacting with the environment, or in Ludwig von Bertalanffy's words "organized cohesive complex of elements standing in interaction."[14] The interaction refers to both the relationship between a system and its environment, and among the complex elements of the system (subsystems). Subsystems perform the specific functions required for organizational survival, such as production, boundary spanning, maintenance, adaptation, and management.[15] Organizations' survivability depends on the proper and aligned functioning of these subsystems.

Systems inherently are exposed to entropy—a term originated in thermodynamics—which means the tendency for systems to move forward to a chaotic or random state, in which there is no potential for energy, transformation or work. "Organism" is a metaphor for organizations which grow, adapt, spawn and sometimes die. At other times their existence is due to negative entropy (store of energy, winter fat of the organizations[16]), by which organizations may live indefinitely. An organization's effectiveness and success depends heavily on its ability to adapt to its environment, shape the environment, or find a favorable environment in which to operate.[17]

All open systems have the following basic characteristics:

---

[13] Troy S Thomas at al., *Warlords Rising*, (New York: Lexington Books,2005) p.11

[14] Ludwig von Bertalanffy, 1976, quoted in Troy S Thomas at al.', *Warlords Rising*, (New York: Lexington Books,2005) p.11

[15] Richard L. Daft, *Organization Theory and Design* (Mason , OH: Thomson South Western, 2004),14

[16] William D. Casebeer, quoted in Troy S Thomas at al.', *Warlords Rising*, (New York: Lexington Books,2005) p.16

[17] Daft, p.15

1. They import energy and resources from the environment (input)
2. They transform this energy and resources (throughput)
3. They export the product to the environment (output)
4. They adapt their components in a dynamic pattern of activities (feedback).

B.   TERRORISM AS AN OPEN SYSTEM

Terrorist systems are open social systems importing the inputs (people, money, weapon, and information etc.) into the transformation process to export the output (fear, terror, intimidation, awareness, coercion, mobilization) into the environment to achieve the organization's primary task. The feedback mechanism enables the organizations to adapt to an unstable environment; also, it allows the subsystems to work in alignment with each other.
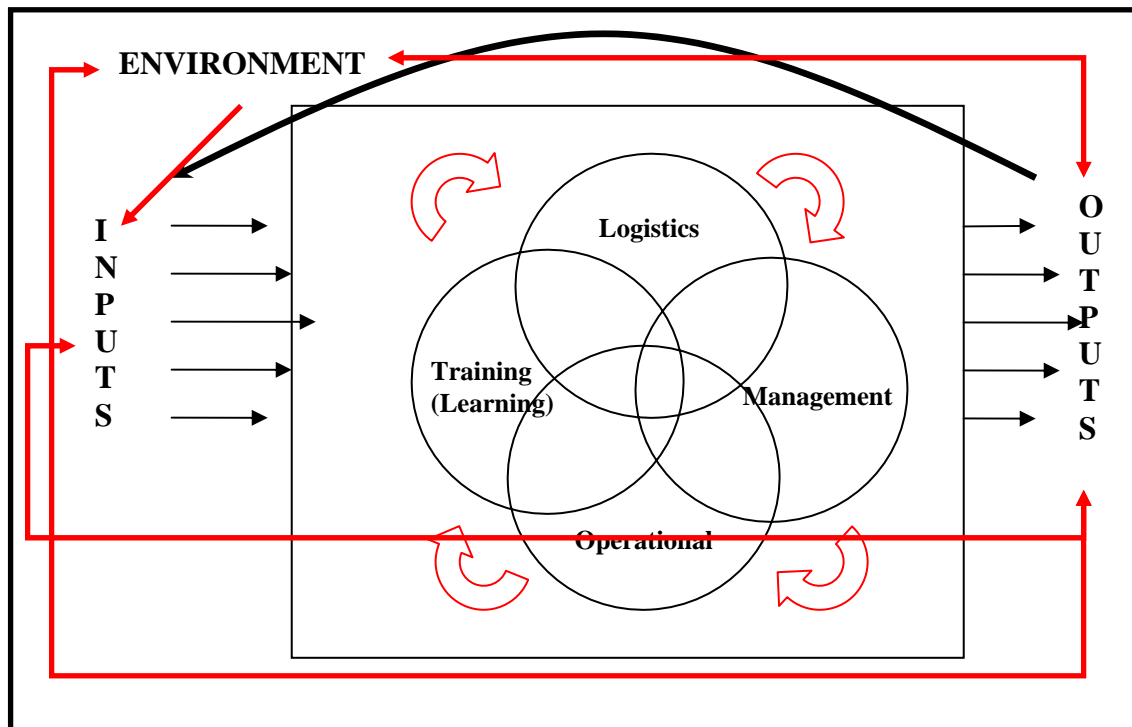
Figure 1 Terrorism as a System

Previous studies about terrorism and counterterrorism were compartmentalized into some specific categories such as psychological, environmental, organizational or instrumental. All the components of the terrorist system (inputs, outputs, environment, and subsystems) are very interrelated. In order to explain terrorism and terrorist

organizations in systems terms, first we have to understand these components and the relationships between and among these components. These relationships are not constant but dynamic. The dynamic nature of these relationships is a power of dark organizations in terms of their adaptation to their environments.

C. RELATIONSHIP BETWEEN ENVIRONMENT AND USE OF TERRORISM (OUTPUTS)

There are many studies explaining the relationship between environment and use of terrorism and the emergence of terrorist organizations. The primary effect of the environment to the terrorist organizations is that environment has a preparatory effect on individuals (input) to participate in the terrorist organization.

The environment in which terrorist organizations operate consists of target audiences from which the organization seeks support, other rival organizations that have the same goal, counter terrorism organizations that add more turbulence to the environment, and social, political and economic conditions.

Ted Robert Gurr observes that there is a relationship between economic disparity and the tendency of individuals to resort to violence, and he generalizes this disparity with the term "relative deprivation." Relative deprivation is the discrepancy between the "ought" and the "is" of collective value satisfaction.[18] One of the main pillars of his approach is how long the group is subjected to feelings of deprivation and the extent to which it believes things may change. The longer that deprivation persists, combined with the subjective feeling that chances of change are small, the inclination to violence will grow.[19]

Krueger and Maleckova argue that the evidence they presented in their study suggests that there is little direct connection between poverty, level of education, and taking part in terrorism. Their analyses of datasets about Hezbollah members and Palestinian suicide bombers show that they come from economically advantageous families, and they have relatively high levels of education compared to the general population.[20]

---

[18] Ted Robert Gurr, *Why Men Rebel* (Princeton NJ: Princeton University Press, 1970)

[19] Scot Atran, "Mishandling the Suicide Terrorism," *Washington Quarterly,* p. 77-79

[20] Alan B. Kruger and Jetka Maleckova, "Poverty, Education and Terrorism: Is there a Causal Connection?," *Journal of Economic Perspectives*, 17, Fall 2003, p.119-144

The 9/11 Commission report reached a similar conclusion: "Terrorism is not caused by poverty. Yet when people lose hope, when societies break down, when countries are fragmented, the breeding ground for terrorism is created."[21]

A causal relationship between economic systems in the environment and terrorism is another subject that was studied by Michael Mousseau. He argues that there is a contract-based relationship between people in liberal democracies and a clientalist relationship in authoritarian societies, and the economic integration of the society has a great effect on terrorism:

> Social integration with contracts promotes respect for individual choice, the equal rights of strangers, and religious and cultural tolerance: the cultural base of the liberal state. Social integration with reciprocity promotes acceptance of the group beliefs and values, loyalty to the group leaders and distrust of outsiders: the cultural basis of authoritarianism and sectarianism. In this way, a socio-economy of reciprocity is a necessary condition for the resort to terror and genocide and a leading cause for illiberal democracy, ethnic separatism, and weak and failed states in the developing world.[22]

Thinking of the results of the studies, which concludes that the majority of the terrorists come from wealthy or middle class families, and the reality that people become more engaged politically and ideologically when they reached a fairly high standard of living, and that terrorism is the most extreme form of political engagement, one wonders if wealth is the reason. Daniel Pipes argues that "the spread of free market capitalism and liberal democracy . . . is probably an important factor in rising political Islam."[23] The main pillar of his argument is that wealth, freedom of speech, and representation of extreme ideas that are offered by capitalism and liberal democracy in the Middle East also creates sources and opportunity for radical movements.

Another popularly argued theme is the correlation between the democratic conditions in the environment and terrorism. F. Gregory Gause III argued that there is little data to support the notion that democracies directly diminish the prospect of

---

[21] Quoted in Yonatan Levy, "9/11 Report: The Middle East Dimension," available at http://www.washingtoninstitute.org/distribution/Pol890.doc accessed 13 September 2006

[22] Michael Mousseau, "The Nexus of Market Society, Liberal Preferences, and Democratic Peace: Interdisciplinary Theory and Evidence," *International Studies Quarterly*, 47, December 2003, pp. 483-510

[23] Daniel Pipes, "God and Mammon: Does Poverty Cause Militant Islam?," *National Interest*, 66 Winter 2001/2002 , p. 14-21

terrorism.[24] Citing the survival of ETA after Spanish transition from dictatorship to democracy, the IRA in the UK, one of the oldest democracies, terrorist attacks in India, the world's largest democracy, the Red Army faction in West Germany, and the Oklahoma City bomber, Gause demonstrates that democracies are equally susceptible to terrorism. On the other hand China, an authoritarian state, had no terrorist incident reported in State Department's Patterns of Global terrorism report.[25] As Dr. Michael Freeman concluded, democracy may be a cure for tyranny but not a good cure for terrorism.[26]

Erica Chenoweth looks at the environment from a government stability perspective. According to Chenoweth, levels of democracy do not necessarily diminish the likelihood of terrorist development.[27] Instead, the political stability of the existing regime is the most significant factor affecting the origins of terrorism. She argues that the results in her study appear to show that governments should crack down on terrorism and revoke civil liberties in order to maintain stability, but defeating terrorism is not always the desired outcome. Implying state repression and state terror, she concludes that "stability, no less than revolution, may have its own kind of terror."[28] How the government of Peru's struggle and achievement against Shining Path turned into a tool of eliminating political rivals and consolidating the tyrannical power of Fujimori is an apt example to show the need for separating terrorists from the population in the efforts of counterterrorism[29].

The effects of other rival organizations in the environment are another relationship between an organization and the degree of terror that the organization may employ. Mia Bloom argues that if there are similar organizations in the environment it is likely that the violence will escalate as a result of rivalry among the groups. She supports

---

[24] F. Gregory Gause III, "Can Democracy Stop Terrorism?," *Foreign Affairs*, September/October 2005

[25] US State Department, "Country Reports on Terrorism, East Asia and Pacific, China" available at http://www.state.gov/s/ct/rls/crt/2005/64336.htm accessed on 13 July 2005.

[26] Michael Freeman, Unpublished Scripts, 2006

[27] Erica Chenoweth, "Instability and Opportunity: The Origins of Terrorism in Weak and Failed States" in *The Making of a Terrorist* ed. James J. F Forest, vol.3 Root Causes, (Westport CT: Greenwood Publishing Group, 2006) p. 17-31

[28] Ibid. 21

[29] *"State of Fear: Peru's Comisión de la Verdad y Reconciliación*," 2004, DVD, New Day Films

her argument by giving examples from three Palestinian groups Al-Aqsa Martyrs Brigade, Palestinian Islamic Jihad and Hamas.[30]

D.   RELATIONSHIP BETWEEN OUTPUTS AND ENVIRONMENT

The outputs of terrorist groups are basically creating fear and a sense of insecurity, intimidation, mobilization of the population around their cause, awareness (propaganda by the deed), and coercion of the government until they reach their goals. The effects of the outputs of terrorist systems on an environment or population were studied by Friedland and Merrari in a survey on the Israeli population about their willingness to concede to terrorist demands.[31]
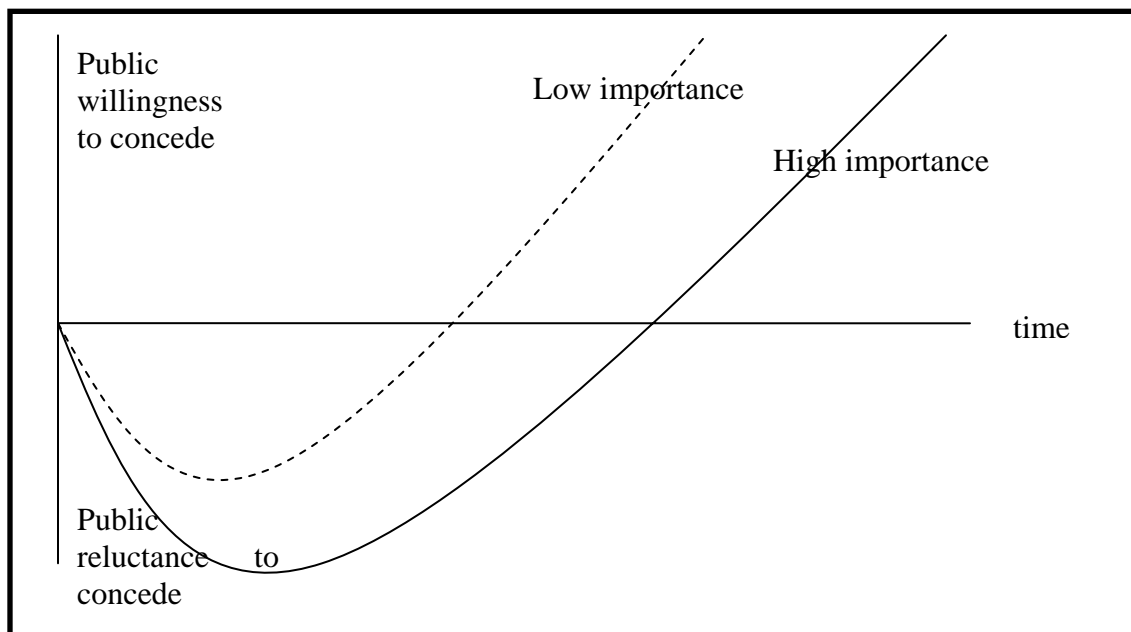
Figure 2 The Relationship between importance, Threat Intensity and Public Willingness to Concede to Terrorist Demands

According to their study, during early stages the terrorist threats can lead to a strengthening of public resolve not to concede. The extent and the degree to which such strengthening might occur is related to the importance of the issue to the public; the more important the issue, the greater the strengthening of resolving not to concede in the face

---

[30] Mia Bloom, *Dying to Kill: the Allure of Suicide Terror*, (New York: Columbia Uni. Press, 2005)

[31] Friedland and Ariel Merrari, cited in Maxwell Taylor, *The Terrorist*, (New York: Brassey's Defense Publishers, 1988), p.29

of the threat. However, the more prolonged the threat, regardless of the importance of the issue, the greater eventually is the probability of conceding to the terrorist demands.

The importance of the subject to the public is in relative terms, and the importance of the same issue may be perceived differently in various societies. The secessionist demands of ETA and the importance of the issue in the minds of Spanish people compared to the same demands of terrorist organization PKK and the importance of the issue in the Turkish public's mind are relatively different. Consequently, Spanish people seem to be satisfied with the autonomy given to the region by the Spanish government. On the other hand, the Turkish public is unwilling to appease terrorist PKK's demands, although almost everyday a terrorist incident occurs in the country.

E.   RELATIONSHIP BETWEEN OUTPUTS AND INPUTS

The output of the terrorist system is communication with the environment, what Gordon McCormick calls "signaling strategy."[32] Terrorist plots are a message to intimidate the enemy as well as a message to their support (and prospective support) groups that they are strong enough to challenge the enemy's superior power. The fear and insecurity they create in a population's mind leads the population to think that their security forces are not capable of providing the services that they are supposed to; thus there is more cause for the population to support the terrorist organization. Without support a terrorist organization cannot survive. To enable recruitment and logistical support, they have to demonstrate enough violence or terrorism, which they see as "propaganda by deed." The money that they make from the terrorist acts like extortion, bank robberies, and drug trafficking is funneled back as an input to sustain the organization. As a result the outputs of the terrorism system attract or try to mobilize the population to support the terrorist organization and its cause.

Not only outputs affect the inputs, but also inputs have effects on the outputs. The terrorist organizations try to recruit very selectively according to distinct criteria which will be discussed in detail in next chapter, because the wrong people may cause adverse consequences for the terrorist organization.

---

[32] Bruce Hoffman and Gordon McCormick, "Terrorism, Signaling and Suicide Attack," *Studies in Conflict and Terrorism,* 2004,27, p. 243-281

F.   INTERRELATIONS BETWEEN SUBSYSTEMS

Systems must overcome the universal law of nature in which all forms of systems move toward disorganization or death. Congruence, sometimes referred to fit or alignment, is a prerequisite for systems to operate efficiently. Congruence is defined as the relations among the internal system components and between systems and their environments.[33] As suggested in Figure 1, terrorism system is composed of four subsystems that fulfill the necessary functions. These subsystems are dependent on each other, and one's dysfunction can cause the entire system to collapse.

The training subsystem recruits from a population, equips the recruits with necessary mindsets and skills, and enables the system to adapt to the hostile environment by means of organizational learning. Social organizations, because they are open systems, can import more energy from the environment than is immediately required and store it for use during periods of crises such as a concentrated counter-terrorism campaign. This process is called negative entropy. Unless the negative entropy capability is shattered, the terrorist organization will survive. The training subsystem is the main creator of negative entropy.

The operational subsystem is responsible for directly producing the outcomes of the terrorist system, which is very important for its survival. As Gordon McCormick writes, "Terrorist groups must maintain a minimum violent presence to remain effective. . . To hold their audience (and hold themselves together) they must continue to act."[34]

The logistics subsystem is responsible for providing necessary resources that other subsystems need to fulfill their functions. This subsystem is the closest subsystem to the environment from which the terrorist organization is fed, so this subsystem must act in very clandestine manner in order to maintain its legitimacy in the eyes of its population and the government. Also the distinction between the sympathizers and active members of the terrorist organization blurs in this level in terms of counterterrorism activities. Security forces have to be ready to confront the problems posed by this blurry situation in their efforts not to play into the terrorists' hands, who try to provoke overreaction of the government.

---

[33] Michael I. Harrison and Arie Shirom, *Organizational Diagnosis and Assessment: Bridging Theory and Practice*, (Thousand Oaks, CA Sage Publications), 1999, p.52

[34] Hoffman and McCormick, p. 245

The management subsystem is responsible for decision making, strategy development, and exercising control or influence over the organization. The influence and control over the organization changes from group to group, based on ideology and counterterrorism measures, but the coordinator role of this sub-system is common in all terrorist organizations. PKK is an example of a highly hierarchical terrorist organization as a result of its Marxist Leninist ideology that sees the organization as a vanguard of the alleged movement. On the other hand, Al Qaeda is at the other extreme--franchising terrorism around the world with terror entrepreneurs. However, both core management subsystems approve and coordinate the terrorist actions.

G.   CONCLUSION

Terrorist systems are complex, open systems that have some unique characteristics, as stated by Virginia Anderson and Lauren Johnson35:

1. Complex systems tend to be self stabilizing

This characteristic explains why so many terrorist organizations still exist although there is enormous efforts to stop them functioning. They mutate to fit their environment; first, to survive, and second, to achieve their goals.

2. Complex systems are or appear to be purposeful

Terrorist systems stabilize themselves by means of various strategies that may appear to be in conflict with the organization's overall goal. However, their actions are purposeful, because the terrorist organizations use various reinforcing loops—(loops compound change in one direction with even more change in that direction)--to align the overall goal of the system. They also use some balancing loops (loops or interventions to the system that try to bring things to the desired state and keep them there) that dampen system action. For example, terrorist organizations want as many members as possible, but this endangers the underground nature of the organizations and makes them susceptible to destruction by counter terrorism agencies; thus they use a balancing loop to decrease or minimize the active membership for survival, especially in the initial stage.

---

35 Virginia Anderson and Lauren Johnson, *Systems Thinking Basics*, (Massachusetts: Pegasus Communications Inc., 1997), p.78-79

3. Complex systems, like simpler systems, are capable of using feedback to modify their behavior

The self-stabilizing function is achieved by a feedback mechanism between all the components of the system. The operational subsystem arranges levels of violence according to feedback that comes from the environment (population). The logistics sub-system sends feedback to the management subsystem to find new methods for maintaining financial support. The training subsystem arranges itself according to the feedback that comes from the increasing pressures of counterterrorism agencies, and finds new ways to recruit and train its members.

4. Complex systems can modify their environments

The main goal of terrorist organizations is to modify their environments, simply because they are not pleased with the current environment, be it the economic system, constitutional conditions or current territorial structure of the country. Unlike other lobby organizations, they try to change it by violence.

5. Complex systems are capable of replicating, maintaining, repairing, and reorganizing themselves.

Al Qaeda is an example of how a terrorist organization replicates itself. It began with a hierarchical structure, and now no one knows exactly what it is--an organization, a network, a movement, or a global insurgency.

After explaining how terrorism destabilizes its environment in system terms, it must also be noted that systems thinking can also be used to destabilize terrorist systems. The strategy depends on the time, tolerance of the consequences of the strategies, and decisiveness on the strategies.   For example one could cut the energy that the system imports (i.e., financial support), misalign one or more sub-systems (i.e., the training subsystem), create a turbulent environment that the terrorist system can not tolerate (i.e., increase troop numbers); changing the environment in a way that it can not affect the inputs to resort terrorism (i.e. bring democracy to the Middle East, because democracies don't fight each other); or change the environment in a way that the outputs of the terrorist systems can be absorbed or tolerated by the environment, and do nothing (i.e. more people die in traffic accidents than do in terrorist plots). All these alternatives come with their own side effects and tradeoffs that counter terrorism agencies must consider. In

light of these arguments, the next chapter will explain the training subsystem of terrorist organizations in order to develop a strategy that misaligns this particular subsystem.

THIS PAGE INTENTIONALLY LEFT BLANK

III. TERRORIST TRAINING AS A SUBSYSTEM

Those who can make you believe absurdities, can make you commit absurdities.

Voltaire

A. INTRODUCTION

The terrorism phenomenon has been explained in a variety of ways, ranging from the psychological level to the political level. All these explanations have merit, and are valuable in understanding this complicated or wicked phenomenon. However, they are inadequate in explaining why an overwhelming majority of people who have the same grievances as the people who take violent actions, does not employ terrorism. Although the active terrorists are scornful and critical of the great numbers of the others who remain behind, Ehud Sprinzak argues that people who employ terrorism always need a rearguard who do not engage in terrorism, because no terror underground is capable of sustaining itself without a non-terrorist support system of friends and accomplices who provide information, hideouts, escape routes, and supplies.[36] As will be discussed in this chapter, the difference between those who resort to terrorism and those who do not comes from the conditioning process the former is exposed to. Understanding this conditioning process in which terrorists learn violence is critical to developing effective counterterrorism strategies.

B. CONCEPTUALIZING THE TERRORIST TRAINING SUBSYSTEM

1. Functions of the Terrorist Training Subsystem

Before examining the process, explaining the importance of the outcomes of the terrorist training subsystem and what it means for the whole terrorist system is useful.

The training subsystem creates, intensifies and sustains the competence, commitment and the skills that the terrorists will apply to reach their goals. No one is born with the will and knowledge of how to build bombs, use pistols, conduct

---

[36] Ehud Sprinzak, "The psycho political formation of extreme left terrorism in a democracy: The case of Weatherman," in *Origins of Terrorism* ed. Walter Reich, (Washington D.C.: Woodrow Wilson Center Press) p.85

surveillance, or hijack airplanes. These are skills that must be taught and practiced. In addition, the training builds in a desire to acquire these skills.

The training subsystem not only teaches the ways and means, but also justifies them by means of intensive indoctrination. After training, neither the people who are killed in bloody plots are considered innocent, nor are terrorist assassinations, bombings, abductions or robberies thought of as evil doings. They all have different meanings as a result of the indoctrination process they experience. The training not only instills the moral rightness and importance of the cause for militant action, but also creates a sense of eliteness and provides the social rewards of solidarity and group esteem for excelling in terrorist exploits.[37]

The training subsystem establishes ties to the group and creates a sense of belonging. Understanding group dynamics will explain why creating group identity is the priority for any given terrorist establishment, be it revolutionary leftist, ethnic separatist, or religious. No terrorist group wants their members to act absolutely free from the group. They prefer to function in a group setting, in which the individuals are strongly influenced by the powerful forces of group dynamics. According to Post, the group dynamics of various terrorist groups differ significantly based on the ideology that they support. "The nationalist-separatist terrorists are often known in their communities and maintain relationships with friends and family outside the group. They can move into and out of the community with relative ease. In contrast, for anarchic-ideologues, the decision to cross the boundary and enter the underground illegal group is an irrevocable one."[38] We can add the religious groups to the first category in which terrorists share the same but more radical beliefs with the community in which they are embedded.

The training subsystem enables knowledge to be stored inside the boundaries of the system, and facilitates its passing through generations. We can call this function by the name "organizational learning." The system starts with the basic knowledge of the founders' experiences or the system's ideological domain and it adapts itself to the hostile environment by means of the learning process.

---

[37] Albert Bandura, "Mechanisms of Moral Disengagement" in *Origins of Terrorism* ed. Walter Reich, (Washington D.C.: Woodrow Wilson Center Press), p.186

[38] Jerold M. Post, "Terrorist Psycho-logic" in *Origins of Terrorism*, ed. Walter Reich, , (Washington D.C.: Woodrow Wilson Center Press): p.32-33

2. How are Terrorists Trained?

Conventional thought on terrorist training was that it was brainwashing. Brainwashing first drew public attention through the treatment of American POWs in Korea, whose susceptibility to communist propaganda was the main concern. The Patty Hearst case in 1970s also made media headlines. The tapes made by Patty Hearst, declaring her solidarity with her captors, The Symbionese Liberation Army, created speculations that her personality had been systematically manipulated by indoctrination under extreme stress. "At her trial in 1974, after an armed robbery on the behalf of Symbionese Liberation Army, psychiatrics experts on brainwashing such as Dr Margaret Singer, Lois J. West and Robert Lifton testified in favor of Hearst. Although Hearst was convicted, many observers viewed her as a victim of brainwashing."[39]

The "brainwashing" explanation is obviously an oversimplification of the terrorism phenomenon, and it eliminates the responsibility of the individuals for their deadly actions, as Sheflin and Opton indicate: "When a society turns its eyes away from the deepest question off responsibility, brainwashing becomes the explanation that avoids the responsibility of looking inwards."[40] However, the "brainwashing" explanation is not valueless as applied to terrorism. Studies about the reverse process of brainwashing called "deprogramming" may be useful in terms of the rehabilitation of the detained terrorists to normal social life.

Another explanation of terrorist training is that it is a normal learning process generally applied in any training and education institution. The methodology used in the process of terrorist training appears to be universal due to the universal characteristics of human learning and behavior change. Explaining these characteristics is, at the same time, explaining methodology in any terrorist training system.

There are two dimensions of learning: process and content. The content of terrorist training is made up primarily of the ideology that the terrorist group follows and the technical skills that terrorists need to conduct their attacks. Content varies from group to group, but the process that includes the methods by which knowledge, skills, attitudes and behaviors are acquired is achieved in four

---

[39] Thomas Robbins and Dick Anthony, "Deprogramming, Brainwashing and the Medicalization of Religious Deviant Groups," *Social Problems,* 29 February 1982

[40] Alan Sheflin and Edward Upton, *Mind Manipulators*,(New York: Paddington, 1978), p. 50

basic universal forms: 1) Conditionin*g,* 2) Observational, 3) Instructional, and 4) Trial-and-Error. All people learn according to these cognitive-behavioral principles, and proper manipulation of these factors makes for good teaching. [41] The question is how do terrorist organizations manipulate these factors?

The author has categorized terrorist training into two main levels: "individual training" where the individuals learn terrorist tactics and techniques mostly derived from the trial-and-error type of process, and organizational learning by which their systems learn and maintain their resiliency. Individual training has two dimensions: motivational, by which the terrorists develop the will to kill, and operational training, by which the terrorists get the skills to kill.[42]

```
                    ┌─────────────────────────────┐
                    │ Terrorist Training Subsystem │
                    └─────────────────────────────┘
              ┌───────────────────┴───────────────────┐
     ┌─────────────────────┐              ┌─────────────────────────┐
     │  Individual Training │              │ Organizational Learning │
     └─────────────────────┘              └─────────────────────────┘
        ┌────────┴─────────┐
┌──────────────────────┐ ┌──────────────────────┐
│ Motivational Training │ │ Operational Training │
└──────────────────────┘ └──────────────────────┘
```
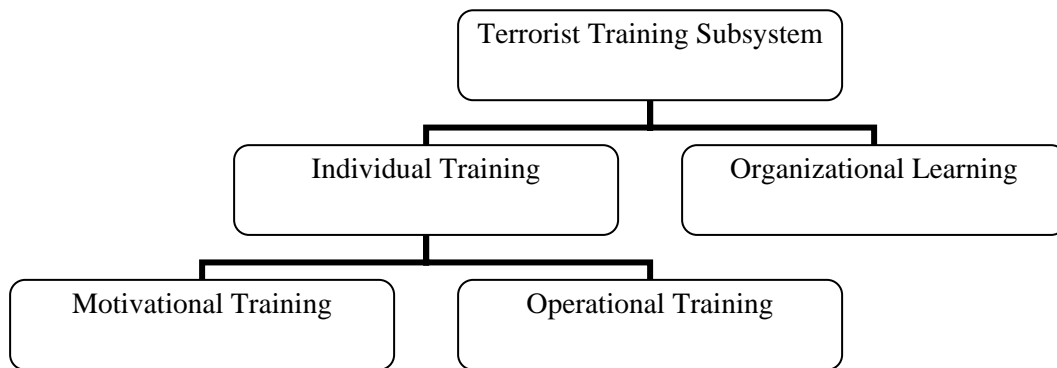
Figure 3 Levels of Terrorist Training

C.   INDIVIDUAL TRAINING

Generally, terrorist training takes place within the boundaries of the terrorist system. Planning, coordination, and implementation are all fulfilled in formal way of sign up and train the recruits in designated geographical terrorist camps. However, the deadly consequences of terrorist attacks by Timothy Mc Veigh in Oklahoma City in 1993, separate abortion clinic bombings of Christian extremists, and the Casablanca bombings of 2003 by Islamic extremists revealed that the individual level of learning is as important as the learning in system

---

[41]Bernard Saper, "On Learning Terrorism," *Terrorism* ,11 1988, p.16

[42] The terms "motivational training" and "operational training" are barrowed from James J F Forest, Training Camps and Other Centers of Learning" in *Teaching Terror,* ed James J F Forest (New York, Rowman and Littlefield Publishers Inc.) 2006 p.69-109

boundaries. Moreover, thanks to the U.S.-led global war on terrorism, terrorist systems can not operate as freely as previously, especially in terms of training activities, and thus they try to innovate new methods in which individual training is their focus with the help of new technologies.

1. Steps in Individual Training

1. Continuous propaganda to prepare candidates for militancy.
2. Selective recruitment.
3. Manipulation of the individual's psychological and physical environment.
4. Enabling recruit identification with the group.
5. Assigning the trainee to a real target to prove his commitment and maturity at the end of the training process.

These steps seem to overlap with military training in boot camps, where volunteer or obligatory individuals are trained in isolated posts to be taught--in simple terms--how to kill the enemy. The boot camp metaphor does not completely fit the terrorist training situation, but it has still has value in terms of the universality of the principles of teaching. Margaret Singer, who was a leading scholar in mind manipulation in cults at Berkeley University, gives the differences between an American Marine and a cult recruit, which has many similarities with terrorist organizations in terms of training and creating a group identity.[43]

a) Step 1: Continuous Propaganda to Prepare Appropriate Conditions for Militancy

The recruit has to be open to the ideology and the main goal of the terrorist system. Depending on the ideology of the terrorist system, a recruit has to have some common points with the system in ethnicity, religion, sect of a particular religion, race, or grievances; or in other words, the individual must be at least on the fourth floor in Fathali Moghaddam's "staircase metaphor" to be recruited. Moghaddam argues that the staircase to terrorism is conceived of as having a ground floor and five higher

---

[43] See the list where a marine recruit differs from a terrorist recruit. Margaret Singer, "How the United States Marine Corps Differs from Cults" available at http://www.csj.org/studyindex/studycult/study_marine.htm accessed on 10 June 2006

floors.[44] On the ground floor, perceptions of fairness and feelings of relative deprivation dominate. Some individuals from the disgruntled population will climb to the first floor to seek solutions, but if they do not see possibilities for individual mobility and do not feel that they can adequately influence the process in which decisions are made, they keep on climbing.

On the second floor the individual gets frustrated and displaces his or her grievances onto the enemy, and individuals more prone to psychically displace aggression onto the enemy climb further up the staircase.

On the third floor the individual begins to perceive the terrorist strategy as morally justified. Those who become more fully engaged with the morality of the terrorist system keep climbing up the staircase and become ready for terrorist recruitment. Terrorist systems continuously engage in propaganda campaigns to lead the targeted population to reach the third step, from where they can recruit their candidates or import energy into their boundaries in systems terms.

b)   Step 2: Selective Recruitment

Recruitment is the most important function of terrorist organizations to survive and reach their ends. Recruitment has to be selective because the terrorist system cannot afford the costs stemming from faulty recruitment strategies. The wrong strategy in recruitment would affect the whole system. If the system does not import the appropriate input from the environment, the process will not be able to transform these inputs into appropriate throughputs to perform the overall goal of the system. The terrorist system has to use its resources very efficiently because they are very scarce. If the outcome of the training subsystem is not competent enough to perform their functions then they are likely to be captured or killed without doing much harm to the enemy wasting the system's scarce sources, and moreover, risking the underground nature of the whole terrorist system. Thus terrorist systems choose their recruits very selectively. Different terrorist systems have different selection criteria.

The recruit has to prove that he is proficient to be a member of the underground system. Physical and mental health and personality must be strong enough

---

[44] Fathali M. Moghaddam, "The Staircase to Terrorism A Psychological Exploration," *American Psychologist*, February- March 2005, p. 161-162

to endure the underground life. For example, in the Al-Qaeda Training Manual, necessary qualifications and character for the organization's members are stated as follows:

1. Islam: The member of the organization must be Muslim.
2. Commitment to Organization's Ideology: This commitment frees the organization members from conceptual problems.
3. Maturity: The requirements of military work are numerous, and a minor cannot perform them.
4. Sacrifice: He [the member] has to be willing to do the work and undergo martyrdom for the purpose of achieving the goal and establishing the religion of majestic Allah.
5. Listening and Obedience: In the military, this is known today as discipline. It is expressed by how the member obeys the orders given to him. This is what our religion urges.
6. Keeping Secrets and Concealing Information: . . . Allah says, "Even though their plots were such that as to shake the hills!" [Koranic verse]. Allah's messenger-God bless and keep him- says, "Seek Allah's help in doing your affairs in secrecy."
7. Free of Illness: Allah says, "There is no blame for those who are infirm, or ill, or no resources to spend."
8. Patience
9. Tranquility and "Unflappability"
10. Intelligence and Insight
11. Caution and Prudence
12. Truthfulness and Counsel
13. Ability to Observe and Analyze
14. Ability to Act, Change Positions and Conceal Oneself.[45]

Hamas's selection criteria for suicide bombings are explained by Salah Sh'hadeh, commander of the Ezzedeen al-Qasam brigades in an interview posted in the Web site Islam Online:

---

[45] "Military Studies in the Jihad Against Tyrants" ed. Jerold M. Post, (USAF Counter-proliferation Center Maxell Air Force Base, Alabama) , 2005 p. 25-34

QUESTION: How do you choose who will carry out a martyrdom operation?

SH'HADEH: The choice is made according to four criteria: First, devout religious observance. Second, we verify that the young man complies with his parents' wishes and loved by his family, and that his martyrdom will not affect family life--that is, he is not the head of the family and he has siblings, as we will not take an only child. Third, his ability to carry out the task assigned to him, and to understand its gravity; and fourth, his martyrdom should encourage others to carry out martyrdom operations and encourage jihad in the hearts of people.[46]

The conclusions of the studies about terrorist personalities generally states that the radical Islamist terrorists are psychologically normal, relatively well educated compared to the general population, and come from middle or upper middle class families. This conclusion often times surprises the reader, even the researcher. But the selective selection principle of terrorist organizations explains the reason for those conclusions.

To be selected as a recruit in training camps is not sufficient to be an Al-Qaeda member, according to Rohan Gunaratna. Only the best of the best are selected to carry out the operations. Potential recruits' other features, such as having a Western country citizenships or language capabilities, are additional qualities that an Al-Qaeda member has to possess.[47] Marc Sageman notes that only ten to thirty percent of the people who were trained in Al Qaeda training camps later became members of the organization.[48]

If the candidate is a direct victim of the designated enemy, it is easier to be selected. For example, the black widows in Chechnya whose husbands were killed in Chechen Russian conflict, the woman suicide bomber in a Jordanian hotel in 2005 whose

---

[46] The Middle East Media Research Institute, "Interview with the Hamas Commander of the Al-Qassam Brigades," July 24 2002,available at
http://www.memri.org/bin/articles.cgi?Page=archives&Area=sd&ID=SP40302 accessed on 1 November 2006

[47] Rohan Gunaratna, *Inside Al-Qaeda Global Network of Terror*, (New York: Berkley Books, 2003) p.95,

[48] Marc Sageman, *Understanding Terror Networks*, (Philadelphia: University of Pennsylvania Press, 2004) p. 121

brother was killed in Iraq or Palestinian suicide bombers in general are the direct victims of the opposite side's actions.[49]

c) Step 3: Manipulating the Recruit's Physical and Psychological Environment

Physical and psychological isolation is necessary for an individual not to think of alternative ways to find solutions to their grievances other than that of the organization. In this period, recruits are not allowed to communicate with the outer world, and they undergo intensive doctrinal training. The mental burden of the indoctrination merges with the physical exhaustion stemming from the time periods of training, making trainees more and more isolated, and become more committed to their cause and leaders. A daily schedule in Ansar al-Islam training camp in Iraq, in the words of a trainer of the camp in Iraq, shows the intensive overload on the trainees: "The daily schedule in the camp began with dawn prayers, training, a lecture regarding weapons, breakfast, noon prayers, rest, prayers, a lecture regarding Koran recitation, prayers, training exercises, and prayers-after which each brother goes to his post where he sleeps and stands guard. Around 2:30 a.m. there is a night prayer."[50]

Killing is not a natural thing for a human being under normal conditions, and people must abandon their innate inhibitions to kill. Even in cases where the killing is morally justified, like war or criminal situations, people hesitate, as Grossman put it in his study on "killing."

> Ardant du Picq's surveys and observations of the ancients, Holmes's and Keegan's numerous accounts of ineffectual firing, Holmes's assessment of Argentine firing rates in Falklands War, Griffith's data on the extraordinarily low killing rates among Napoleonic and American Civil War Regiments, the British Army's lesser reenactments of historical battles, the FBI's studies of non-firing rates among law-enforcement officers in 1950s and 1960s, and countless other individual and anecdotal observations all confirm that the vast majority of combatants throughout history at the moment of truth when they could and should kill the enemy, have found themselves to be 'conscientious objectors.[51]

[49] "Iraqi Woman Confesses to Role in Jordan blasts" *Associated Press*, November 13 2005 available at http://www.msnbc.msn.com/id/9979747/ accessed 20 June 2006

[50] Abu Mohammed al-Salmani, Audio tape release script "The Camp of the Al-Ansaar Fighters in the land of Mesopotamia" May 7 2006, available at http://www.globalterroralert.com/pdf/0506/rawacamp0506.pdf accessed on 10 October 2006.

[51] Dave Grossman, *On Killing: The Psychological Cost of Learning to Kill in War and Society*, (New York: Little Brown Company, 2004), p. xv

In the training process a trainee abandons or is supposed to abandon the inhibitions through gradual, systematic conditioning. Development of the willingness to kill is usually achieved through an evolutionary process, in which recruits may not recognize the transformation they are undergoing.

To make people cold bloodedly take the lives of innocent people in buses, shopping malls, and airports to topple rulers or regimes, or other political ends requires really powerful psychological mechanisms or what Albert Badura calls "moral disengagement."[52]

People who are socialized to perceive killing as a condemnable act can be transformed into skilled combatants who may feel pride in taking human life. Members of the group defend their militant actions, but condemn those of their adversaries. The moral justification comes in combination of various forms according to Bandura's analysis. These forms are:

Advantageous Comparison: "the more flagrant the contrasting inhumanities, the more likely it is that one's own destructive conduct will appear trifling or even benevolent."[53] According to Bin Laden the 3000 persons killed in the World Trade Center terrorist acts were much less compared to the numbers in killed in Palestine, Chechnya, Lebanon, Hiroshima and Nagasaki.

Euphemistic Language is used in describing the terrorist acts, victims, and the tools that they use. Suicide attack becomes "martyrdom operation"; bombs become "vertically deployed anti-personnel devices," and the bystanders become "collateral damage" or "outside current accuracy requirements." Terrorists label themselves as "freedom fighters." Breaking the laws of the country becomes "civil disobedience."

Displacement of Responsibility: "Under displaced responsibility they view their actions stemming from the dictates of authorities rather than from their own

---

[52] Albert Bandura, "Mechanisms of Moral Disengagement" in *Origins of Terrorism* ed. Walter Reich (Washington D.C.: Woodrow Wilson Center Press, 1998) p. 161-191

[53] Albert Bandura., 40

personal responsibility." Nazi prison commandants and their staffs divested themselves of personal responsibility for their unprecedented inhumanities;[54] they claimed they simply carried out their orders.

Diffusion of Responsibility: This is achieved in several ways, such as division of labor and group decision making and collective action. People act more cruelly under group responsibility than when they hold themselves personally accountable for their actions.[55]In a situation in which each individual engages in part of the terrorist plot, no one actor will feel responsible for the whole detrimental act.

Disregard, Distortion of Harmful Consequences: It is easier to harm others when their suffering is not visible and when destructive actions are physically and temporally remote from their injurious effects. "When people see and hear the suffering they cause, vicariously aroused distress and self-censure typically serve as self restrainers."[56] A suicide bomber does not see the consequences of his or her action simply because he or she will be dead, or a terrorist will not see the consequences of the bomb he plants because he will be away when it is detonated.

Attribution of Blame: In this process, people view themselves as faultless victims driven to extreme means by forcible provocation, rather than acting on a deliberate decision. According to PKK terrorists their actions are in retaliation to the government's operations to eliminate the terrorist group, rather than deliberate actions according to their terrorist agenda.

Dehumanization: It is difficult to mistreat humanized persons without risking self-condemnation. Self-censure against cruel conduct can be disengaged or blunted by stripping human qualities from people. Labeling the enemy as "infidels," apostates, monsters, great Satan or axis of evil rather than human beings will lessen the amount of self -condemnation after a cruel attack.

---

[54] Neil J. Kressel, "Why People Fallowed Hitler?" *in Mass Hate: the Global Rise of Genocide and Terror* (New York , London: Plennium Press), p.165

[55] Albert Bandura p.45

[56] Ibid.

As another form, rationalization can be added to Bandura's forms of moral justification. In an article issued in Kuwait the writer rationalizes the killings of innocent people for their involvement in complementary activities:

> It should be noted that in the modern age, when an army is engaged in war, non-fighters join it who are involved in complementary activities and, at times, the course of war depends mainly on them. These are, for example, activators of the army's computer systems that direct military activities, such as civilian-manufactured computer systems for directing missiles or sophisticated bombs . . . It is common knowledge that the Zionist society is a military society, and every one of them takes part in warfare, whether as a soldier in the army, as a reservist, by paying taxes to the Jewish state and its army which kills Muslims, or by voting to put [Prime Minister Ariel] Sharon in a position to give the orders to kill [Mohammed] Al-Dura [the child killed in his father's arms in Gaza last September] and other Palestinian children .[57]

Sayyid Muhammad Fadlallah, a leader of Hezbollah, rationalizes the suicide bombing campaign that the organization engaged in Lebanon asking, "What is the difference between setting out for battle knowing that you will die after killing ten [of the enemy], and setting out to the field to kill ten and knowing you will die while killing them?"[58] Fadlallah argued that there was no difference.

The Irish Republican Army (IRA) teaches the new recruits at the very beginning—because it is located at the very beginning of their training manual—why their violent means are justified:

> The Irish Republican Army, as the legal representatives of the Irish people, is morally justified in carrying out a campaign of resistance against foreign occupation forces and domestic collaborators. All volunteers are and must feel morally justified in carrying out the dictates of the legal government; they as the Army are the legal and lawful Army of the Irish Republic which has been forced underground by overwhelming forces.[59]

---

[57]"Is Killing Jewish Women and Children Forbidden?," *Al-Watan,Kuwait*, August 31, 2001, cited in Yael Shahar, "Islamic Justification of Killing Non-combatants in War," 12 September 2001, available at http://www.ict.org.il/articles/articledet.cfm?articleid=379 accessed on 10 November 2006

[58] Sayyid Mohammad Fadlallah, quoted in Martin Kramer, the Moral Logic of Hezbollah" in *Origins of Terrorism* ed. Walter Reich (Washington D.C.: Woodrow Wilson Center Press, 1998), p.146

[59] *Green Book* 1 available at http://www.residentgroups.fsnet.co.uk/greenbook.htm accessed on 10 October 2006

Psychologist Anthony Stahelski developed a model of social psychological conditioning through which individuals are transformed into terrorists. In his model the group first eliminates recruit's old social and personal identities and then reconditions them to identify the group's enemies as evil sub-humans or non-humans who should be killed.[60]

Phase 1—Depluralization: stripping away all other group member identities

Phase 2—Self-deindividuation: stripping away each member's personal identity

Phase 3—Other-deindividuation: stripping away the personal identities of enemies

Phase 4—Dehumanization: identifying enemies as subhuman or nonhuman

Phase 5—Demonization: identifying enemies as evil
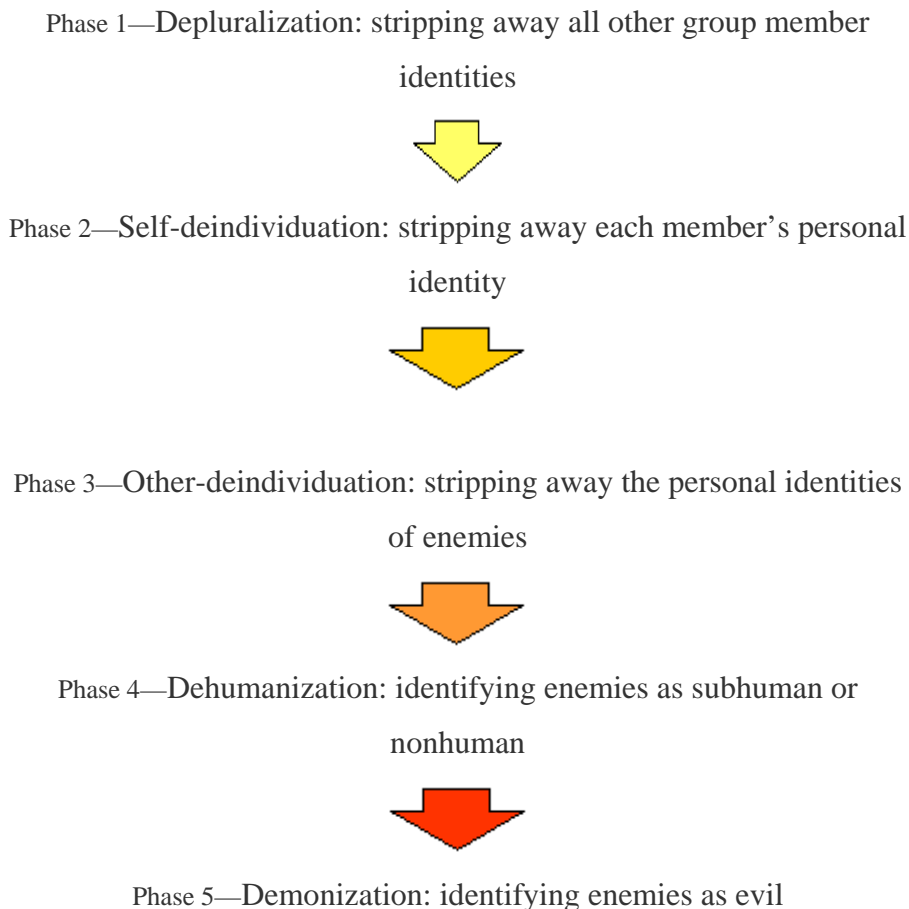
Figure 4 Psychological Conditioning Process

d)   *Step 4: Enabling Recruit Identification with the Group*

As a result of isolation and indoctrination the trainee leaves his self-character and identifies himself with the group. Individuals call each other with general terms like brother, comrade, friend, indicating that they are not individuals anymore, but

---

[60] Anthony Stahelski, *"*Terrorists Are Made, Not Born: Creating Terrorists Using Social Psychological Conditioning*," Journal of Homeland Security*, March 2004, available at http://www.homelandsecurity.org/newjournal/Articles/displayArticle2.asp?article=109 accessed on 6 November 2006

a part of a brotherhood or comradeship. Once this achieved it is easier for the recruit to carry out what the group says. Dave Grossman points out that "Sometimes the integration of the individual in the group so strong that the group's destruction, e.g., by force or captivity, may lead to depression and subsequent suicide."[61] The suicide cases of the Baader-Meinhof gang in German prisons can be explained by this excessive group identity.

e) Step 5: Appointing the Trainee to a Real Target to Prove His Commitment

Dobson and Payne illustrate that Montoneros in Argentina achieve the bonding of the recruit to the organization by having him kill a policeman.[62] The plot is like a practical signature between the terrorist organization and the trainee. The contract assures that individual will remain loyal to the group, because he or she is now a fugitive for the security forces, and in case he or she decides to escape from the organization, the amnesty laws, generally, exclude terrorists who have committed a crime.

D. MOTIVATIONAL TRAINING

Motivational training takes place in a variety of ways such as orally, in print, and through an online format. Such learning is very important to develop an individual's will to kill. Unlike operational learning, motivational learning is not constrained to specific places or conditions. It can be done in schools, madrassahs, mosques, churches, temples, prisons, tea houses, safe houses, and chat rooms. Some governments in their uniform education systems breed hatred into their students against their adversaries, creating a hate culture which helps recruitment of individuals into radical groups, or creating an acceptance in the society for the detrimental acts of terrorist groups.

In her study Daphne Burdman analyses how Palestinian children are indoctrinated to an ideology of self-sacrifice (martyrdom), giving examples from the official text books: "Know my son, that Palestine is your country . . . that its pure soil is drenched with the blood of martyrs . . . Question: Why must we fight the Jews and drive them out of the country?"(in Arabic language for fifth grade) or from Islamic education

---

[61] Dave Grossman, *On Killing: Psychological Cost of Learning to Kill in War and Society* (New York: Back Bay Books, 1996) p.150

[62] C. Dobson and R. Payne, *Counterattack: The West's Battle against the Terrorists*, (New York: Facts on File Inc.,1982)

for the eighth grade, "Mankind has suffered from this evil both in ancient as well as modern times, for indeed Satan has, in the eyes of many people, made their evil actions, appear beautiful. . . Such a people are the Jews."[63] The situation on the other side of the conflict is no different, according to Elie Podeh: "Previous studies of Israeli textbooks have indeed revealed the existence of biases, prejudices and omissions in the description of the Arab-Israeli conflict. These analyses were important because they exposed the often negative and stereotypical way in which the Israeli educational system presented the other—the Arab."[64]

Another study done by the Center for Religious Freedom of Freedom House concludes that Saudi textbooks taught in the public schools continue to reflect a curriculum that inculcates religious hatred towards those who do not follow Wahhabi teachings, and the descriptions of the "other"— Muslim deviants and infidels— in these textbooks for the 2006 academic year do not fit to the picture of moderation and tolerance presented by the Saudi ambassador to Washington and other Saudi officials.[65]

After the bloody Balkans civil war between 1991 and 1995, one of the major concerns was removing offensive material from the textbooks. This is being done by means of an agreement titled "the Agreement on Removal of Objectionable Material from the Textbooks."[66]

Madrassahs—Islamic educational centers—are argued to be potential recruiting pools for radical groups, especially in Pakistan. Although the majority of these madrassahs separate themselves from politics, some are controlled by the radical political parties who are opposed to General Pervez Musharraf, who is providing extensive support for the U.S.-led global war on terrorism. The World Bank estimates that there are 10,000 madrassahs in Pakistan, and 15 to 20 percent of them are thought to provide some

---

[63] Daphne Burdman, "Education, indoctrination, and Incitement: Palestinian Children on Their Way to Martyrdom," *Terrorism and Political Violence*, 15 Spring 2003 p.99

[64] Elie Podeh, "History and Memory in the Israeli Educational System: The Portrayal of the Arab – Israeli Conflict in History Textbooks (1948-2000)," *History and Memory* vol. 12, 2000, p.69

[65]Center for Religious Freedom of Freedom House, "Saudi Arabia's Curriculum of Intolerance with Excerpts from Saudi Ministry of Education Textbooks for Islamic Studies," 2006 available at http://www.freedomhouse.org/religion/pdfdocs/KSAtextbooks06.pdf accessed on 16 October 2006

[66] Ann Low-Beer, "Politics, School Textbooks and Cultural Identity: the Struggle in Bosnia and Herzegovina," *Paradigm* Vol. 2 July 2001 available at http://faculty.ed.uiuc.edu/westbury/Paradigm/LOW-BEER.PDF

military training[67]. These madrassahs are more a threat to the Pervez Musharraf regime rather than as a pool for the Al Qaeda network, because Al Qaeda is inclined not to trust nationalities other than Arabs, as was the case in Afghanistan during the Afghan War. The absence of Afghan members in their global network is another indicator of this fact.[68] However, their location in loosely controlled territories of Afghanistan and Pakistan makes the Pakistani security force's intervention difficult.

E.   OPERATIONAL TRAINING

Operational training gives the trainees the skills to kill. Some of these skills are described in the mini manual of urban guerrilla:

> It is very important to learn how to drive a car, pilot a plane, handle a motor boat and a sailboat, understand mechanics, radio, telephone, electricity and have some knowledge of electronics techniques. It is also important to have knowledge of topographical information, to be able to determine one's position by instruments or other available resources, to calculate distances, make maps and plans, draw to scale, make timings, and work with an angle protractor, a compass, etc. A knowledge of chemistry, of color combination and of stamp-making, the mastery of the skills of calligraphy and the copying of letters, and other techniques are part of the technical preparation of the urban guerrilla, who is obliged to falsify documents in order to live within a society that he seeks to destroy. In the area of "makeshift" medicine, the urban guerrilla has the special role of being a doctor or understanding medicine, nursing, pharmacology, drugs, basic surgery and emergency first aid.[69]

The operational learning should take place in locations with specific characteristics due to its content. The training camp should contain a shooting range, an area for sports activities, etc. Such places must be in remote areas in order not to be detected by security forces or in places where there are no security establishments at all. The Al Qaeda manual gives thirteen qualifications for a training camp, most of which are security related.[70]

---

[67] Cited in C. Christine Fair, 2004, "Militant Recruitment in Pakistan," *Studies in Conflict & Terrorism*, vol. 27 p. 489-504

[68] Sageman, p.72

[69]Carlos Marighella, "Technical Preparation of the Urban Guerrilla" in *Mini Manual of Urban Guerrilla*, available at http://www.marxists.org/archive/marighella-carlos/1969/06/minimanual-urban-guerrilla/ch04.htm accessed on 10 November,2006

[70] See *The Al Qaeda Training Manual*, edited by Jerold M.Post (Alabama: US Counterproliferation Center, 2005) p.51

F. LEARNING TERRORIST SYSTEMS

Terrorist systems adapt to their very dynamic environment by means of a learning process at the tactical, operational and strategic levels. In planning operations, selecting targets, and applying new weapons or new technologies, terrorist groups must gather necessary strategic and tactical information, combine it with their and other systems' past experiences, store the information inside the system's boundaries, and disseminate the information to the necessary levels.

Brian A. Jackson and Horacio R. Trujillo call this process organizational learning and define it as "a process through which the members of the organization develop new knowledge about their actions and outcomes, share this knowledge throughout the organization, incorporate it into the routines of the organization, and store the knowledge in an organizational memory."[71] They suggest a four stage information processing model through which information must pass: acquisition, distribution, interpretation, and retention.[72]

1. Acquisition

The acquisition of the knowledge occurs in various ways, such as through the knowledge that the system inherits from their original leaders and ideologues, knowledge by direct experience, knowledge from external resources like other terrorist systems in the environment, and strategic learning actions.[73] Terrorist systems study successful implementations of others' actions, and simply imitate them. After Hezbollah used suicide bombings, other groups adopted them: Chechen rebels in 2000, Tamil Tigers in Sri Lanka in 1987, the Palestinian group Hamas in 1994, the PKK in Turkey in 1996, and Al-Qaeda with the bombings of the U.S. embassies in Kenya and Tanzania, and other attacks. Perhaps the most important form of knowledge transfer takes place through the migration of fighters from one operational theater to another. Afghanistan and Bosnia in the past, and Iraq, Chechnya and Somalia today are the places where global terrorists share their operational knowledge.

---

[71] Horacio R. Trujillo and Brian A. Jackson, , "Organizational Learning and Terrorist Groups," in *Teaching Terrorism* ed. James JF Forest, (Lanham MD: Rowman & Littlefield Publishers, 2006) p. 54

[72] Ibid. 55

[73] Ibid. 56

In terms of strategic learning, a document posted in a well-known Islamist message board called "Jihadi Iraq-Hopes and Risks" is worth noting. The document contained a detailed analysis of the weaknesses of the Western coalition in Iraq, recommended 'painful strikes' against the Spanish forces, and advised the Islamic resistance to make utmost use of upcoming Spanish elections in March of the next year.[74] On March 11, 2004, just before the elections, the Madrid bombings occurred, killing 192 people and injuring 1600. An Al Qaeda-affiliated group took responsibility, announcing that the plot was to punish the Spanish government for participating in the Western coalition in Iraq.[75] The efforts that paved the way to Aum Shrinkiyo's chemical attack on the Tokyo subway system is another example of the strategic learning process of terrorist systems. Thirty to 80 people were involved in Aum Shinrikyo's chemical weapons program. They possessed the weapons at the end of a complex series of scientific research and acquisition programs, including international activities, and then they conducted an attack that caused a shift in threat assessments by transnational sub-state actors.[76]

2.   Distribution

Terrorist systems disseminate information by either directly teaching it in their training activities or distributing it in the form of printed material. The more widely distributed the information across the system the less likely the information will be lost and the system's learning capability will deteriorate.[77] The Internet plays a central role in terms of terrorist information dissemination today because of its easy access and anonymous nature. The option of storing knowledge in physical form was not an accepted one in the past because of operation security concerns of the terrorist system. The preferred technique was directly including the information in their training programs and disseminating it through teaching. However, this form of retention of knowledge is

---

[74] Brynjar Lia and Thomas Heghammer, "Jihadi Stratgic Studies: Alleged Al Qaeda Policy Study Preceding the Madrid Bombings," Studies in Conflict & Terrorism, 27, 2004 p.355

[75] Gilles Tremlet, "We Bombed Madrid, says Al Qaeda Tape," 14 March 2004, Observer Guardian available at http://observer.guardian.co.uk/waronterrorism/story/0,,1169143,00.html

[76] John V. Parachini, "The making of Aum Shinrikyo's Chemical Weapons Program," in The Making of a Terrorist vol. 2 Training ed James F. Forest (Westport, CT: Greenwood Publishing Group, 2006) p. 277

[77] Parachini, p.279

more prone to deterioration; thus, storing knowledge in physical or virtual environments now is more popular. The use of the Internet by terrorist groups has enhanced their dissemination and retention capability.

3.   Interpretation

Generally the information stored in terrorist manuals is not raw information but an interpreted version. The information has to be interpreted according to the frameworks of the system and then stored. For example, the reason each group employs violence varies from group to group in accord with their different interpretations. In one communiqué of the Red Army Faction in Germany the only way, according to them, is urban guerilla warfare: "the urban guerrilla is the logical consequence of the negation of parliamentary democracy long since perpetuated by its very own representatives; the only and inevitable response to emergency laws and rule of hand grenade [is] the readiness to fight with the same means the system has chosen to use."[78]   On the other hand in an Al-Qaeda publication, the purpose of human targets is stated: the Jews, Christians, anybody close to the Jewish and Christian governments such as Hosni Mubarak (Egypt's President), and seculars are given priority respectively, "to stress the struggle of the faiths. Targeting Jews and Christians is a proof that it is a religious struggle."[79]

4.   Retention

Now the most preferred technique for preserving knowledge is printed materials. One of the most notorious training manuals for the Brazilian revolutionary terrorist groups in the 1970's was Carlos Marighella's "Mini Manual of the Urban Guerilla." which inspired like-minded terrorist groups such as Red Brigades and the Red Army Faction. This manual gives how-to type of instructions about subjects varying from personal qualities of the urban guerrilla, weapons, logistics, tactics, executions, sabotage, bank assaults as a popular tactic, guerrilla security, to the seven sins that the guerrilla must avoid.[80]

---

[78] Ulrike Meinhof , 1971, "The Concept Urban Guerrilla," available at http://www.baader-meinhof.com/students/resources/communique/engconcept.html accessed on 1 November 2006

[79] Ben Venzke, , " Al-Qaeda Targeting Guidance," Intel center, 2004,available at http://www.asisonline.org/newsroom/aq.pdf accessed on 1 November 2006

[80] Carlos Marighella, *Mini Manual of the Urban Guerrilla* ,1969,available at http://www.Baader-meinhof.com/students/resources/print/minimanual/manualtext.html accessed on 10 October 2006

The Green Book of the IRA is another example of information retention for next generations and other terrorist systems as a secondary effect. The Green Book begins with a section explaining the historical struggle for an independent Ireland and depicts England as an occupier and imperialist power. In other words, it defines the enemy largely in socialist terms and gives instructions about guerilla strategy, operation security, anti-interrogation techniques, and so-called court marshal procedures of the terrorist group. The detainees in prison stored their information about the interrogation techniques of the security forces and how they were arrested in order to help the other members of the organization avoid making the same mistakes.

Al-Qaeda's manual, *Declaration of Jihad against the Country's Tyrants, Military Series* is another example of information retention in printed form. The eighteen lessons include "general introduction," necessary qualifications and characteristics for the members, counterfeit currency and forged documents, organization of military bases, apartments and other places, concealment, means of communication and transportation, training, and weapons (measures related to buying and transporting them), member safety, security plans, definition of special operations, espionage, assassinations using poisons and cold steel, torture methods, and prisons and detention centers. In the manual written by an experienced instructor of the Terrorist Group of Egypt before it merged with Al Qaeda,[81] there are examples from the Prophet Mohammad era as well as examples from KGB and Mossad agents, showing the adaptive learning capability of the network.

G.   CONCLUSION

Dave Grossman formulates the probability of a person to kill with the variables below:

Probability of Personal Kill= (demands of authority) X (group absolution) X (total distance from victim) X (target attractiveness of victim) X (aggressive predisposition of killer)[82]. Each variable in the equation is also a product of independent sets of variables. The training process increases the values of each independent variable of the equation. A trainee turns into an obedient follower of the authority, is bonded to

---

[81] Rohan Gunaratna, Inside Al Qaeda, (New York Berkley Books, 2003), p.96

[82] Grossman ,p.341

40

the group, views victims demonized and more attractive to kill, and becomes technically skilled through the training process. The strategic acquisition of new knowledge and technology makes the group more likely to employ mass killings in its absolute form of using weapons of mass destruction (WMD).

Increasing numbers of the captured terrorists in detainee camps or ordinary prisons throughout the world sparks a question in people's mind: Is it possible to reverse this process and take these terrorists back to normal social life again? This is already being practiced by some countries in various forms such as Indonesia, Singapore, Pakistan, Sri Lanka and Britain and planned to be implemented in Australia.[83]

In Yemen Religious Dialogue Council (RDC), headed by Hamoud al-Hitar designed a program to convince suspected militants that carrying out violent actions in the name of Islam is not sanctioned by the Quran or the Sunna. It has since released 364 suspected militants in six separate pardons, following their pledges to abstain from violence. Bin Laden's former bodyguard, al-Bahri, is one such graduate of the RDC's program.[84]

The success of the program can be measured by the percentage of the terrorist that return their militant activities, but what percentage should be considered an acceptable threshold for success? There is always a risk for releasing the wrong people, but it is worth trying. Michael Taarnby argues "Perhaps there are other measures of success within this relatively new field of counter- terrorism. Judge al-Hittar has received a number of death threats . . . He currently lives under armed protection, an indication that someone is following his work and has drawn the conclusion that the soft-spoken cleric is a danger that should be eliminated"[85] The time will show exact results of the program. As we discussed in the first chapter the solutions to wicked problems can not be judged as right or wrong but they should be treated as a hypothesis unless proven unsuccessful. Various countries, Yemen in particular are trying their own solutions for the time being.

---

[83]Patrick Goodenough, "Can Terrorists be reprogrammed?" CNSnews, March 10, 2006, available at http://www.cnsnews.com/news/viewstory.asp?Page=%5CForeignBureaus%5Carchive%5C200603%5CFOR20060310b.html

[84] Gregory Johnsen, "Yemen's Passive Role in the War on Terrorism," *Terrorism Monitor*, 4, February 23, 2006, available at http://jamestown.org/terrorism/news/article.php?articleid=2369911 accessed on 8 October 2006

[85] Michael Taarnby, Yemen's Committee for Dialogue: Can Jihadists Return to Society?, *Terrorism Monitor,* 3, July 15, 2005, from http://jamestown.org/terrorism/news/article.php?articleid=2369745

Physical training camps are very vulnerable to kinetic attacks of security forces. Most of Al Qaeda and its affiliate camps around the world have already been destroyed. As a response, terrorist organizations has used the Internet , especially for recruiting and training, as illustrated by internet communiqués among subjects who discuss in detailed knowledge about explosives, and web pages full of hatred. Terrorist training is mutating from a formal planned activity that is done in specific geographical places with specific techniques to self-service type by means of the Internet that provides all the equipment for turning a recruit into a terrorist. The next chapter will explore how terrorist organizations moved their training camps to the virtual world.

IV. THE VIRTUAL TRAINING CAMPS OF THE TERRORIST TRAINING SUBSYSTEM

A. INTRODUCTION

The network that became "the Internet" started during the Cold War, when the U.S. Department of Defense was concerned about the vulnerability of its computer network to a nuclear attack. The basic idea was to decentralize the whole system by creating an interconnected web of computers. The Internet was designed so that every computer could communicate with every other computer. Starting with a few computer networks, the Internet expanded exponentially by adding private networks of businesses, educational and research institutions, and government organizations and agencies inside its boundary. On September 18, 2006, the global Internet community reached the number of 1,086,250,903; that is, about sixteen out of one hundred people around the world use the Internet.[86] In certain regions of the globe the percentage is far higher; for example, in the United States 69.1 percent of the population uses the Internet.[87]

The Internet has become a platform where people can meet from all over the world and exchange ideas. This was once thought to be an opportunity to spread the idea of democracy and freedom around the world. However, it has become a tool for mobilizing people around any kind of idea and movement. Professor Dorothy Denning points out that "groups of any size, from two to millions, can reach each other and use the Net to promote an agenda. Their members and followers can come from any geographical region on the Net, and they can attempt to influence foreign policy anywhere in the world."[88]

As John Arquilla states, "every opportunity comes with its own vulnerability."[89] In the same way that nuclear power promised humanity an enormous source of energy,

---

[86] "Internet Usage Statistics- The Big Picture World Internet Users and Population Stats" available at http://www.internetworldstats.com/stats.htm accessed on 17 October 2006

[87] Ibid.

[88] Dorothy Denning, "'Activism, Hacktivism, and Cyberterrorism: The Internet as a Tool for Influencing Foreign Policy available at http://www.rand.org/pubs/monograph_reports/MR1382/MR1382.ch8.pdf reached 10 October 2006

[89] John Arquilla, Class Lecture of "Conflicts in the Information Age" at Naval Post Graduate School October 2005

but became a catastrophic weapon in the hand of human beings, the Internet is now being exploited by international terrorists, who are considered to be today's most dangerous threat to global security. Gabriel Weimann notes that "in 1998, fewer than half of the 30 groups that the U.S. State Department designates as 'Foreign Terrorist Organizations' (FTOs) had websites. But by the end of 1999, nearly all of them did."[90]

According to Weimann, the Internet is used by terrorists for various purposes such as data mining to determine targets and gather information about these targets, networking terrorists, recruiting and mobilizing the target audience, providing instructions in online manuals, planning and coordinating the attacks, fund raising, and attacking other rival terrorists.[91] The focus of this chapter is terrorist use of the Internet for training purposes.

B.   WHY VIRTUAL TRAINING CAMPS?

1.   Result of Adaptation

According to the White House's progress report on the global war on terrorism, the United States, with the help of its allies and partners, killed or took into custody two thirds of the senior Al Qaeda leaders, operational managers and key facilitators, and made terror networks lose access to nearly $200 million.[92] Despite these developments, Al Qaeda remains one of the most significant threats to the Western world in general and to U.S. national security in particular.

The main reason for Al Qaeda's resilience is its capability of adaptation to its hostile environment. Al Qaeda started with a hierarchical organization, but evolved over time and became a network of cells loosely affiliated with each other.[93] Perhaps in time these cells will disappear due to counterterrorism measures, and Al Qaeda will become a leaderless resistance movement that has little or no organizational affiliation as a result of its adaptation strategies. Bruce Hoffman argues that "Al Qaeda's resiliency and longevity

---

[90] Gabriel Weimann, *Terror on the Internet: The New Arena, the New Challenges* (Washington, D.C.: U.S.Institute of Peace, 2006), p. 15.

[91] Ibid.

[92] White House, 2003, "Progress report on the Global War on Terrorism," available at http://www.state.gov/documents/organization/24268.pdf accessed on 16 October 2006

[93] Jason Burke, *Al Qaeda: True Story of Radical Islam*, (London:Penguin Books, 2004) p.1

are predicated not on the total number of Jihadists that it might have in the past, but its continued ability to recruit, to mobilize and to animate both actual and would-be fighters, supporters, and sympathizers."[94]

The Internet plays a great role in Al Qaeda's adaptation strategy, as the 9/11 report concludes:

> The emergence of [the] World Wide Web has given terrorists a much easier means of acquiring information and exercising command and control over their operations. The operational leader of the 9/11 conspiracy, Mohammed Atta, went online from Hamburg, Germany to research U.S flight schools. Targets of intelligence collection have become more sophisticated. These changes have made surveillance and threat warning more difficult.[95]

Terrorist websites, discussion forums, news, and multimedia blogs provide outlets for terrorist organizations to distribute their materials. While some designated terrorist websites can be monitored or removed, the material remains available online at other platforms. In order to disseminate material to large numbers and store it, terrorists no longer need a website. They can do it by means of peer to peer file sharing programs. The new file sharing technologies and programs are successful in providing an adequate hard drive open to file sharing.

2.   New Opportunities

Due to their extremist beliefs and values, terrorists have to maintain their anonymity to exist, and to operate in social environments that may not agree with their particular ideologies or activities. The Internet, for that reason, offers anonymity and easy access from nearly anywhere in the world, with the ability to post messages, exchange e-mails, upload and download information, and disappear into cyberspace. According to Gabriel Weimann, the Internet offers terrorists the following advantages:

- Easy access
- Little or no regulation, censorship, or other forms of government control
- Potentially huge audiences spread throughout the world

---

[94] Bruce Hoffman, "Redefining Counterterrorism: The Terrorist Leaders as CEO," Rand review available at http://www.rand.org/publications/randreview/issues/spring2004/ceo.html accessed on 11 October 2006

[95] National Commission on Terror Attacks, "The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks upon the United States," (New York: W.W. Norton, 2004) p 88

- Anonymity of communication

- Fast flow of information

- Interactivity

- Inexpensive development and maintenance of a Web presence

- A multimedia environment (the ability to combine text, graphics, audio, and video and to allow users to download films, songs books, posters, and so forth)

- The ability to shape coverage in the traditional mass media, which increasingly use the Internet as a source for stories.[96]

As a result of these advantages terrorist organizations use the Internet for various purposes such as:

- As an instrument in their terrorist actions like data mining for possible targets, planning, and coordination

- Recruitment and mobilization

- Fundraising

- Communication with their target audience and the government in forms of propaganda and communiqués

- Motivational and operational training.

- Attacking an opponent's vulnerable technology systems in the form of cyber terrorism.

Without recruits the terrorist organization cannot survive. The recruitment and training strategy of terrorist networks (that of Al Qaeda in particular) is, today, beyond classic sign up and train strategy. Instead, they try to inspire people who are close to their ideology around the globe, and create franchise organizations or individuals to attack Western, particularly American, targets. In this franchising strategy adapted from the business world, another business strategy, advertising, is used to attract new individuals or groups close to their ideology. As Bruce Hoffmann points out, "despite the multiplicity and diversity of terrorist websites, they share a number of key characteristics in common. These sites are often notable for their colorful, well-designed and visually arresting graphic content. In this respect, they seem designed particularly to appeal to a computer

---

[96] Weimann, p. 30

savvy, media-saturated, video game addicted generation."[97] The internet is the main instrument for the modern terrorist networks for recruitment and training.[98]

The online manual of al Qaeda, "Al Battar," addresses the would-be terrorists: "Oh Mujahid brother, in order to join the great training camps you don't have to travel to other lands. Alone, in your home or with a group of your brothers, you too can begin to execute the training program. You can all join the Al Battar training camp."[99] This call also should be a wake up call for counterterrorism experts to focus on the use of new technologies in terrorism, especially for recruiting and the training purposes.

Although the online manual of Al Qaeda offers its own material, the Internet is full of material which motivates an individual to become a terrorist, and once he or she has made up his or her mind, he or she can reach a lot of how-to type material needed to carry out an attack.

C.   MOTIVATIONAL TRAINING ON THE NET

We defined motivational training as the process that gives individuals the will to kill by creating a sense of hatred and an "us versus them" mindset. The official websites of the terrorist organizations already serve that purpose and are known and monitored by official or unofficial watch groups. A thorough and extensive scan of the Internet from 2003-2005 showed that more than 4,300 Web sites serving terrorists and their supporters.[100] On the other hand, innocent Internet firms whose first consideration is profit are largely used by terrorist organizations for disseminating their materials in the form of documents or multimedia products.

The video sharing web sites like You Tube, Google video or Yahoo videos become an arena where two opposite sides fight with their videos. Although there are some restrictions for posting videos, a lot of terrorist content is available on the Net. The target audiences of these videos is not only sympathizers but also Web surfers who have

---

[97] Bruce Hoffmann, "Use of Internet by Islamist Extremists," available at http://www.rand.org/pubs/testimonies/2006/RAND_CT262-1.pdf accessed on 12 October 2006

[98] John Arquilla and David Ronfeldt, "Networks and Netwars: The Future of Terror, Crime, and Militancy" available at http://www.rand.org/pubs/monograph_reports/MR1382/index.html accessed on 10 October 2006

[99] "Al Battar, online manual of Al Qaeda," vol. 1. cited in Gabriel Weimann, *Terror on the Internet*, p. 111

[100] Gabriel Weimann, p. 15

nothing to do with current conflicts, but are seen as potential supporters or even potential militants of the future. For example, You Tube, which is the largest video sharing site on the Net, contains a lot of propaganda videos of terrorist groups like Al Qaeda, PKK, FARC, ETA, IRA, and LTTE.

You Tube, whose slogan is "broadcast yourself," also gives the opportunity to viewers to post their comments about the videos. The comments, that anyone can write anything in any language without any restrictions, are also sources that breed hatred in the bones of the people who watch the videos, creating or empowering the sense of "us versus them." The individual postings of private videos either shot by a private in the Israeli, American or British Army, which their commanders have no knowledge of and cannot prevent, or deliberately prepared terrorist attack videos, or beheading scenes breeds hatred on both sides. As Gabriel Weimann points out, these individual postings of pictures or videos are one of the sources of the mainstream media. These postings, which are also primary sources for the conflict, are in turn publicized by popular satellite TV networks or popular newspaper commentaries, and become secondary propaganda material for terrorist groups.101

The U.S. Defense Secretary Donald Rumsfeld quoted Ayman Al Zawahiri, the number two man in Al Qaeda, in a speech before the Council on Foreign Relations: "More than half of this battle is taking place in the battlefield of the media. We are in a media battle in a race for the hearts and minds of Muslims," and admitted that "[t]oday we're engaged in the first war in history -- unconventional and irregular as it may be -- in an era of: e-mails, blogs, cell phones, blackberries, instant messaging, digital cameras, a global Internet with no inhibitions, hand-held video cameras, talk radio, 24-hour news broadcasts, satellite television. There's never been a war fought in this environment before."102

The Internet Salafi Jihadists have responded quickly to the February 17 address of the Defense Secretary, using it as a weapon in their sophisticated propaganda war to motivate their supporters. The Global Islamic Media Front (GIMF) posted on the al-

---

101Weimann, p.39

102 Donald Rumsfeld, "Speech to Council on Foreign Relations" available at http://www.defenselink.mil/speeches/2006/sp20060217-12574.html accessed on 10 October 2006

Ghorabaa forum on February 19 a declaration celebrating this now-acknowledged media superiority over the U.S. military. The declaration calls for individuals skilled at photography by mobile phone and video camera to spy on the enemy and expose his ignominy and shame, for them to publish to the masses with the aim of striking the enemy in images, audio, statements, poetry, flash and so on . . . which exposes the real state of affairs, for this is the greatest weak spot.[103]

D.   RECRUITMENT ON THE NET

Terrorist message boards become new recruitment centers of terrorist organizations. The recruiter and the volunteer meet in the message boards on the Net, and after a series of confidence tests, in case of infiltration by counterterrorism agents, the volunteer is accepted into the organization. The first preference of the organizations is for recruits who already possess "terrorist" skills or people who have other advantageous abilities for terrorist attacks. On March 17, 2005, a member of a Jihadist Internet forum posted a message on a website seeking volunteers to register as mujahideen "volunteers for jihad from Arab countries, to break the supply of the American enemy." A member by the name Akho [Brother] Hadla, lists various skills required to become a mujahideen fighter, including: loyalty, knowledge of explosives and disguises, and intelligence information."[104] In addition, the message calls upon "those who know how to draw up [sketch] plans, [to] send me a map of your town in a special [private] message and give the places where the Americans, the Israelis, the Jews or the Christians are located."[105]

E.   OPERATIONAL TRAINING ON THE NET

Terrorist web sites offer operational training material to recruits who want to train themselves on their own. The terrorist websites either provide the material in their own Web pages or they direct people to sites where materials are available. The most important source for this type of material is the online training camp of Al Qaeda, "Al

---

[103] Stephen Ulph, " Internet Mujahedeen React to Rumsfeld's Recent CFR Speech," *Terrorism Focus*, vol.3 Issue 7, 21 February 2006, available at http://Jamestown.org/terrorism/news/article.php?articleid=2369904 accessed on 14 October 2006

[104] SITE institute, "Jihad Registration Message posted on the internet" March 17 2005, available at http://siteinstitute.org/bin/articles.cgi?ID=publications27405&Category=publications&Subcategory=0 accessed on 24 October 2006

[105] SITE institute, "Jihad Registration Message posted on the internet" March 17 2005, available at http://siteinstitute.org/bin/articles.cgi?ID=publications27405&Category=publications&Subcategory=0 accessed on 24 October 2006

Battar." In the seventh issue of the online manual, Abu Hajir Abd al-Aziz al-Muqrin, who identified himself as a head of Jihad in Arabian Peninsula, and killed by the Saudi security forces later, suggests in his article a coordinated effort to destabilize Western interests in the Islamic world by attacking their financial, diplomatic and military targets. The author is surprisingly pragmatic, unlike the other ideologically-burdened rhetoric statements of high ranking Al Qaeda members. He advises restraint when targeting ideological or religious opponents, as doing so may produce a backlash from the local population. Furthermore, the text details operations against economic targets, with the aim of disrupting the "air of stability" necessary for trade and Western business interests to succeed. Also, the article provides a number of insights into the tactics and planning of terrorist operations in urban environments.106

The latter issues of "Al Battar" provide further tactical and technical information for would-be Jihadists. The tenth issue focuses on kidnapping, and analyzes kidnapping operations under the following headings: reasons for detaining one or more individuals by an enemy, requirements needed in forming a kidnapping group, the definition of kidnapping, types of kidnapping, stages of public kidnapping, and security measures for public kidnapping, and how to deal with the hostages in a kidnapping operations.107 In the correspondence section the publication gives two pieces of advice to their supporters, which is worth noting in terms of revealing the new recruiting and training strategy of the terrorist network:

> To all the brothers who inquired on how to join the camp, following are brief instructions. Use the Al Battar training instructions and keep exercising. Try to obtain a firearm (i.e. Kalashnikov), and practice shooting and handling the weapon in the wilderness. In the name of God, try forming a cell or a group, through which you can work on fighting the blasphemers, until you get the chance to join the Mujahideen brothers in Al-Haramain country [Saudi Arabia].To all the brothers who inquired on explosives and how to get them, we say: Manufacturing explosives is not as hard as the enemies of God are projecting it to be. They are doing so, in

---

106"The seventh issue of the al-Qaeda publication focuses on choosing targets to attack in cities," available at http://www.rand.org/research_areas/terrorism/database/statements/2004/07/14/al_battar_training_camp_issue_7_jamestown_foundation_translatio.html accessed on 27 October 2006

107 "Kidnapping the Focus of Al Battar Issue No. 10" SITE institute 27 May 2004, available at http://siteinstitute.org/bin/articles.cgi?ID=publications3804&Category=publications&Subcategory=0 accessed on 27 0ctober 2006

order to keep the young generation from using this effective and scary device against them. When the time is right, we shall provide training on how to make/assemble explosive materials, in the Al Battar magazine, under the "sword of victory" section. Should you be in a hurry to obtain this information, you may use the Jihad Encyclopedia as a reference.[108]

The thirteenth issue gives instructions about how to use an RPG 7 rocket propelled grenade weapon in various positions (standing, kneeling, lying down, and from fox holes), after praising the Jihad against the infidels.[109] The seventeenth issue focuses on pistols; the eighteenth on the 9X18mm "MAKAROV" pistol with illustrations and detailed information on its weight, range, parts, operating mode, loading and unloading, cleaning and maintenance, the characteristics and disadvantages of automatic pistols, etc. The twentieth issue focuses on training in topography.

There are many websites and discussion forums protected by passwords that provide various instructions about topics ranging from practical methods of preparing explosives to first aid instructions for the mujahidat (women Jihadists) to help their fellow mujahideen. SITE institute, a non-profit organization that watches the Jihadist websites and discussion forums, provides an extended list of examples of technical and tactical instructions from terrorist websites:

- Instructions for the extraction and preparation of chloride explosive
- Preparing poisonous gases using simple substances: Botulinum toxin or the rotten meat poison manuals for the highly potent liquid explosive, Astrolite
- An alternate strategy for suicide bombers so as to avoid the consequence of failure when they're fired upon by enemy forces
- A manual instructing in the use of letter and parcel bomb
- A video manual for the preparation of black powder for explosives
- Strategies to circumvent the joint IED neutralizer
- A method for damaging oil pipelines via the application of physical pressure
- A video manual for the construction of an IED detonator
- Manual for making rocket propellant
- A video instruction manual for the planting and dismantling of mines

---

[108] "Kidnapping the Focus of Al Battar Issue No. 10" SITE institute 27 May 2004, available at http://siteinstitute.org/bin/articles.cgi?ID=publications3804&Category=publications&Subcategory=0 accessed on 27 October 2006

[109] "Al Battar Issue No. 13," July 23 2004, available at http://siteinstitute.org/bin/articles.cgi?ID=publications5404&Category=publications&Subcategory=0 accessed on 13 October 2006

- Guide for modifying a cellular phone for use as a remote explosive detonator
- A manual instructing in the use of Clostridium microbe and Clostridium Botulinum toxin as biological weapons
- A manual instructing in the use of "plague" as a biological weapon
- An instructional video for the preparation of nitroglycerin
- A video manual for creating Nitric Acid Fulminate
- An instructional video for preparation of Mercury Fulminate in explosives
- An instructional video for preparation of Ammonium Nitrate in explosives
- A video guide for preparing RDX explosives
- A manual for several varieties of explosives and charges - history, instructions, and applications
- The Jihadi nuclear bomb and methods of nuclear enrichment
- Video instruction for making Sijjeel - an improvised hand-thrown charge against vehicles and personnel
- An illustrated course in booby trapping - a presentation for making buried explosive charges and car bombs[110]

The complexity of the instructions and the ambition for obtaining knowledge about weapons of mass destruction reveal that terrorist organizations still pose a great threat to the United States and its allies.

F.   STRATEGIC LEARNING THROUGH THE NET

One of the basic characteristics of terrorist web sites and discussion boards is their contribution to the adaptation of the terrorist network to its turbulent environment by means of strategic learning. Acquisition of knowledge, its interpretation, distribution, and retention are necessary conditions for learning systems. The Internet provides all four of these conditions for terrorists.

First, the Internet is like a giant library where you can reach millions of documents, multimedia files, and software. For acquiring any type of information, user-friendly search engines provide a great opportunity. Furthermore, terrorist systems do not need to struggle to find any particular information. All the information is already available.

Discussion forums and message boards are the virtual places where pieces of information are interpreted or framed according to the system's standards before reaching

---

[110]"Samples of Militant Manuals Found on Jihadist Websites and Forums," SITE institute, available at http://www.siteinstitute.org/ accessed on 13 October 2006

the customers. The comments of top figures of an organization about a controversial subject, a failure of the organization, a message from an opposite side all pass through the interpretation filter first and are then distributed by means of Internet messages by various means on the network. The interpretation function of the terrorist networks makes strategic information operations difficult for counterterrorism agencies.

One can reach terrorist information from different sources. The proliferation of websites and the peer-to-peer file sharing programs helps keep information inside the organization for future use. The terrorist internet sites, message boards, e-mail groups, and discussion forums are monitored by intelligence agencies, private research organizations, watchdogs, and some responsible ordinary citizens. The recent introduction of new broadband Internet technology to the world has facilitated new usage areas. This new technology is very vulnerable to terrorist exploitation, and has not yet caught enough attention both from scholars and law enforcement agencies. This new opportunity for terrorists and vulnerability for the civilized world is managed by "peer-to-peer" computer networks. Although the first generation of computer networks were peer-to peer-networks of a few computers, with the proliferation of Internet usage, much larger and more centralized server-based networks replaced them.

G.   NEW TECHNOLOGIES NEW VULNERABILITIES

Recent estimates peg the share of peer-to-peer traffic out of the overall Internet backbone traffic volume to be somewhere between 40% and 60%. The total number of users is in the order of hundreds of millions.[111] Obviously part of the success is based on the fact that peer-to-peer (P2P) is an excellent way to circumvent copyright laws and distribute illegal material. All one needs for participating a P2P network is IP connectivity. In this aspect peer-to-peer applications could be classified as self-organizing or self-sufficient.[112] The basic idea of P2P systems is that the system seeks and identifies more powerful computers with larger bandwidth within the system as super nodes or servers in a dynamic nature. The Internet, once controlled by servers, is now becoming a "complex adaptive system" that regulates itself.

---

[111] Markus Isomaki, *Peer to Peer Communication services in the Internet," in Peer to Peer and SPAM in the Internet, Report based a Licentiate Seminar on Networking Technology* ed. Raimo Cantola, (Helsinki University of Technology, Fall 2003) p.29
[112] Markus Isomaki, p.30

P2P is a way of structuring distributed applications such that the individual nodes have symmetric roles. Rather than being divided into clients and servers each with quite distinct roles (such as Web clients vs. Web servers), in P2P applications a node may act as both a client and a server. P2P systems are in general deployable in an ad-hoc fashion, without requiring centralized management or control. They can be highly autonomous, and can lend themselves to anonymity.[113] Various P2P software programs create a network through which all clients join together dynamically to help each other route traffic and store information.

The nodes providing the actual service are thus mainly located in ordinary Internet users' homes, rather than in server hotels, where the majority of traditional WWW, e-mail or FTP servers are run and are hosted. There is also no authority assigned with a large portion of the infrastructure, since everything is distributed among hundreds or thousands or millions of individuals. This makes the attempts to control the systems very challenging. Also, like any self organizing network topology, it is very resilient against failures in parts of the system.[114] The classic HTTP-based and P2P-based networks are illustrated below.[115]

---

[113]Joh Rissen and Tim Moors, September 2004, " Survey of Research Towards the Robust Peer to Peer Networks" available at http://www.cs.umd.edu/projects/p2prg/p2p-overview.pdf accessed on 1 November 2006

[114]Markus Isomaki, p.31,

[115] Klaus Nieminen, *Legal issues in P2P systems*, ed. Raimo Cantola, "Peer to Peer and SPAM in the Internet, Report based a Licentiate Seminar on Networking Technology" (Helsinki University of Technology, Fall 2003) p.115
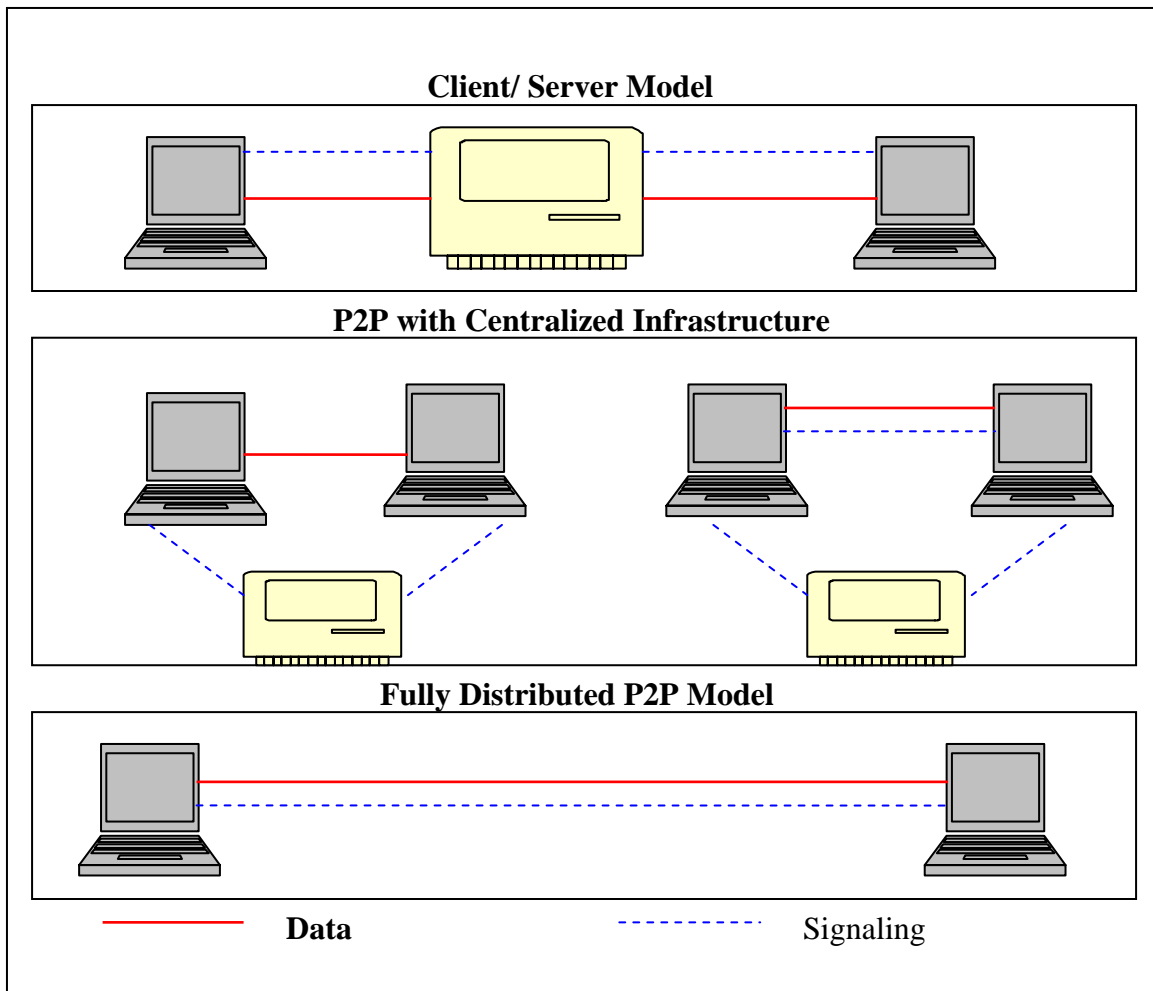
Figure 5 Classic HTTP-based and P2P Based Internet Structure

P2P networks are also used for making VoIP (Voice over Internet Protocols) calls. VoIP is a technology that allows people to make phone calls through the public Internet rather than a traditional public switched telephone network, and predicted that VoIP will account for approximately 75% of world voice services by 2007.[116] The use of VoIP has made it much easier to achieve anonymity in voice communications, especially when VoIP calls are made between computers. This is because VoIP calls between peer computers have no phone numbers associated with them, and they could easily be protected by end-to-end encryption to achieve anonymity. The VoIP system basically works as follows:

---

[116] Xinyuan Wang at al. , "Tracking Anonymous Peer to Peer VoIP Calls on the Internet," (Alexandra Virginia, 2005) p.1

Figure 6 Illustration of Voice over Internet Protocols (VoIP) System

The fact that the VoIP system bypasses satellite phone systems used for delivering voice communications, and its facilitation of encryption from caller to called are challenges for monitoring the VoIP calls. But the study of three scholars at George Mason University demonstrates that it is possible to track VoIP calls that are at least 90 seconds long.[117]

Although the websites of terrorist organizations are sometimes shut down by governments or Internet service providers, the same materials become available in another site later, if not downloaded to hard disks of interested people. P2P provides a way for individuals to search and download files from a peer computer without any need for a Web page. The decentralization provided by P2P technology is obviously a disadvantage for counterterrorism agencies, but also can be an advantage for infiltrating into terrorist networks.

---

[117] Xinyuan Wang at al. 2005, p. 11

H.   CONCLUSION

While people of good will are debating about civil rights and preserving privacy, a lot of evil-minded people are communicating, propagating, planning, fundraising, sharing information, and discussing how they can harm innocent people. Obviously the Internet is a great power for global communication and global economy, but power without control can be dangerous.

Eliminating tangibles in this training subsystem is easier. Terrorist training camps all over the world are being destroyed. Countries that harbor terrorism are coerced by the international community (i.e., Syria, Iran). Bank accounts that fund training camps are frozen. Unstable regions of the world (i.e. Somalia and Afghanistan) that are potential safe havens for terrorist camps have regional or global efforts aimed at stabilization.

The intangibles like countering terrorist ideologies and denying exponential proliferation of terrorist knowledge are harder. The former is difficult because inherently persuading people is harder than coercing them and the later is difficult because democratic countries are reluctant to place restrictions on what people can read and share with others.

As discussed throughout the chapter, the internet becomes a virtual safe haven for terrorist in terms of terrorist training. According to White House's National Strategy for combating terrorism:

> The Internet provides an inexpensive, anonymous, geographically unbounded, and largely unregulated virtual haven for terrorists. Our enemies use the Internet to develop and disseminate propaganda, recruit new members, raise and transfer funds, train members on weapons use and tactics, and plan operations. Terrorist organizations can use virtual safe havens based anywhere in the world, regardless of where their members or operatives are located. Use of the Internet, however, creates opportunities for us to exploit. To counter terrorist use of the Internet as a virtual sanctuary, we will discredit terrorist propaganda by promoting truthful and peaceful messages. We will seek ultimately to deny the Internet to the terrorists as an effective safe haven for their propaganda, proselytizing, recruitment, fundraising, training, and operational planning.[118]

Although it is very difficult to control all the content of the internet it is not free from censorship. According to reporters of San Frontiers, 45 countries restrict their

---

[118] White House, "America's National Strategy for Combating Terrorism," September 2006 available at http://www.state.gov/s/ct/rls/wh/71803.htm accessed on 10 November 2006

citizens' access to the internet, typically by forcing them to subscribe to a state-run internet service provider, which may filter out objectionable sites. Authoritarian regimes recognize the benefits of the internet to economic growth, but at the same time feel threatened by the unprecedented degree of freedom of speech.[119]" Denying terrorists internet use for their various purposes requires a tight coordination and collaboration among the countries. Although achieved by countries, terrorists find ways to publish their same site through another country's web hosting service providers and servers.

Potential use of peer-to-peer networks by terrorists has to be considered by the counter terrorism authorities. Dynamic adaptive nature of terrorist systems will make them seek other ways in case their web presence is eliminated. Peer-to-peer internet networks, which are now largely used for illegal sharing of copyrighted material, seems to be terrorist's new trend. Thus counter terrorism agencies must find ways to monitor each peer computer in the system before the threat becomes greater.

Censorship often creates a contradictory argument in democratic societies. Thus solutions that will be embraced by the general public have to be sought. The author believes that the selective elimination of the terrorist websites is necessary for further success in war on terrorism to prevent the terrorist systems from training their prospective militants in virtual training camps. This effort must be coordinated and done systematically to prevent waste of time and efforts. The next chapter demonstrates three steps of this elimination strategy in terrorist network PKK case study of its website presence.

---

[119] Cited in Dorothy Denning, "'Activism, Hacktivism, and Cyberterrorism: The Internet as a Tool for Influencing Foreign Policy retrieved from http://www.rand.org/pubs/monograph_reports/MR1382/MR1382.ch8.pdf

V. SOCIAL NETWORK ANALYSIS OF A TERRORIST NETWORK'S WEBSITES TO IDENTIFY POINTS OF VULNERABILITY

A. INTRODUCTION

On 12 September 2006, a bomb blast at a children's park in Diyarbakir, Turkey killed eleven and wounded seventeen people, seven of whom were children. After the incident, a PKK-linked website published a news story indicating that a new radical group called Turkish Revenge Brigades took responsibility for the attack. The "new" group called the Turkish Revenge Brigades was portrayed by the PKK website as retaliating to an incident in which a Turkish soldier had been killed in a clash between Turkish Security Forces and PKK terrorists. In the story there were also pictures of the bomb's detonation system, and statements alleging that these pictures were taken from the website of the Turkish Revenge Brigade (TRB), where the TRB's communiqué of responsibility could allegedly be found. The communiqué was obviously designed to provoke hatred between Kurds and Turks saying that "kill 10 Kurds in Diyarbakir for every Turk killed." The incident sparked a lot of violent street demonstrations in southeastern region of Turkey and major cities like Istanbul with the provocations of the PKK terrorists and their media supporters.

When the story was first published on the PKK website, there was no link to the alleged website in which the communiqué of responsibility was published. One day later, the story was republished with an URL address to the website (http://www.turkintikantugayi.8m.com). However, people who entered this site through the link saw the responsibility communiqué and frog images in the places of IED system photographs, which the PKK site alleged that they took from turkintikantugayi.8m.com. The reason why frog pictures appeared in the site was that the website did not have enough capacity to store the IED system pictures that were published in the PKK's news story. PKK terrorist network already had the pictures before bombing. This was their very deliberate psychological campaign to take the advantage of the incident. However it was prepared very unskillfully. The bombers, story makers, website designers, and the provocateurs all proved to be the same group.

Investigations later showed that the bomb was PKK's device that exploded prematurely before it was planted next to a big police station very close to the children's park.[120] The incident was an illustration of how a modern terrorist group uses the internet. Who was the group that killed seven children and attempted to misinform the people using black propaganda to provoke ethnic hatred? What were their aims? It is useful to describe the group in the context of Turkey's terrorism experiences in its 72 year history.

Modern Turkey, since its foundation in 1923, has faced four waves of terrorism. The first wave of terrorism hit Turkey as well as other European countries, when Marxist students took up arms to fight the regime in late 1960s. In 1971, the Turkish military seized power for a short time, restored order and left the government to the civilians again. Most of the terrorist leaders were killed, arrested, or left the country for Europe or other parts of the Middle East.

The second wave of terrorism began in 1974, when the most of the terrorist leaders were released from prisons due to a politically motivated amnesty granted by the government of the day.[121] These terrorists went back to work again launching urban terrorism to a degree that Turkey had never seen before. While Marxist terrorists were targeting law enforcement personnel, conservative politicians, businessman, and uncooperative citizens, ultranationalist groups also took up arms and began attacking the Marxists as well as those suspected of aiding them.

In the meantime, a terrorist group from Lebanon called the Armenian Secret Army for the Liberation of Armenia (ASALA) was assassinating Turkish diplomats and their families all over the World.[122] By 1980, this spiral of terror led to a chaotic situation when the daily body count was sometimes dozens, totaling around five thousand for the period between 1975 and 1980.[123] Turkish military seized power again in a bloodless intervention 12 September, 1980 and restored the order with countrywide marshal law.

---

[120] "PKK appears to be behind deadly blast, say police" *Turkish Daily News* September 16, 2006 available at http://www.turkishdailynews.com.tr/article.php?enewsid=54200 accessed on 25 October 2006

[121] Gunduz Aktan and Ali Koknar, *in Combating Terrorism: Strategies of Ten Countries* ed. Yonah Alexander (New Delhi: Manas, 2005) p.261

[122] Francis P. Hyland, " Armenian Terrorism: The Past the Present ,the Prospects," (San Francisco: West view Press, 1991) p.23

[123] Gunduz Aktan and Ali Koknar, p.262

1.   Turkey's PKK Problem

On August 15, 1984, almost eight months after Turkey returned to democracy again, a small group of Kurdish separatists began to attack Turkish military outposts in the Southeastern region of the country. The separatist terrorist group, which called themselves the Kurdish Workers Party, commonly known as PKK, engaged massive terrorism and rural insurgency campaign which has resulted in more than 30,000 fatalities, mostly terrorists, civilian ethnically Kurdish citizens, civil servants, security forces and anti-PKK village guards.[124]

Terrorist organization PKK was founded by Abdullah Ocalan, who was born in 1948. He studied political science in Ankara University where he became a Maoist. By 1973 he had organized a Maoist group whose goal was socialist revolution in Turkey. After years of indoctrination and recruiting, the PKK terror network was formally established on 7 November 1978. Since then, PKK has been using its terrorism campaign to support its political goal of building a Maoist Kurdish state in the areas of Turkey, Iran, Iraq and Syria. As a result of the successful military operations against the PKK and determined behavior of Turkish Government against the countries that supported the organization, Ocalan was arrested by the Turkish Special Forces in Nairobi after reportedly following a tip from American intelligence.[125] Although the capture of Ocalan caused the terrorist network to loose support for its armed campaign, the group reorganized itself in the power vacuum areas of North of Iraq and began its intensive terrorist campaign in August 2004.[126]

As the other modern terrorist organizations, the resilience of PKK comes from the adaptive strategies that the organization implemented through almost thirty years. The first adaptive strategy of PKK was declaring "so-called unilateral ceasefires" when the Turkish military operations intensified and hurt the infrastructure of the terrorist network. These announcements have never been accepted by the Turkish authorities for two main reasons. The first reason is that the terrorist network is not a main actor in international

---

[124]United States Department of State Office of the Coordinator for Counterterrorism, "*Country Reports on Terrorism 2005*" April 2006, available at http://www.mipt.org/pdf/Country-Reports-Terrorism-2005.pdf accessed 8 November 2006

[125] Bruce Hoffmann, "Is Europe Soft on Terrorism," *Foreign Policy*, Summer 1999, p.63

[126] Country Reports on Terrorism 2005, p.224

arena and can not use terms like "ceasefire," that connotes some legal status. The second reason is to prevent them from disguising their weakness from their support base in times of inaction, because terrorist systems have to maintain a minimum level of violence in order not to be seen as weak in the eyes of their support base.

The last so-called "ceasefire," or time period between terrorist campaigns ended, in 2004, which was declared after the arrest of its ringleader in 1999.[127] At times of inaction, the terrorist organization consolidated its power in the uncontrolled areas of North of Iraq, and resumed its terrorist attacks. PKK, again, announced recently that it stopped its terrorism campaign when coordination efforts of Turkey with the US intensified to make the terrorist organization lay down its arms unconditionally. In this regard, retired US Air Force General Joseph Ralston recently appointed as Special U.S. Envoy for Countering the PKK. General Ralston states the United States position toward PKK issue as following: "the U.S. has supported Turkey in its war on the PKK for a long time. The United States declared the PKK as a terrorist organization almost ten years ago in 1997. The United States was instrumental in getting the European Union to finally declare the PKK as a terrorist organization. There is no question that the United States is far more focused on terror today than it was ten years ago . . . [and] the reason the United States asked me to take this job was to come and have someone that can focus almost full-time on this issue."[128]

The second adaptive strategy of PKK terror network is imitating other terrorist organization's successful tactics. Suicide attacks, hunger strikes in prisons and prison revolts were some the tactics that adopted from the other revolutionary terrorist organizations. Ocalan urged his terrorists to imitate Hamas in 1996 but the persuasion tactics of the bombers were a little bit different from that of Hamas. Rosemarie Skaine explains PKK's tactics: "On October 25, 1996 Turkan Adiyaman, [a female terrorist of PKK], was shot by her own group, [because] she had refused to volunteer for suicide

---

[127] Lenore G. Martin, "*Turkey's Iraq Problem*," Washington Post, September 16, 2006; p. A21

[128] Joseph Ralston , "Live CNN Turk Interview with General Joseph Ralston , Special U.S. Envoy for Countering the PKK and General Edip Baser, Special Turkish Envoy for Countering the PKK," available at http://ankara.usembassy.gov/statement_101906b.html accessed 8 November 2006

bombing. She was shot in front of Leila Kaplan [another female PKK terrorist] as an example of the fate that befalls shirkers. Kaplan, who was 17 years old, then performed the bombing."[129]

The third adaptive strategy of PKK terrorist network has been to change its name periodically because different names enable them to escape from the international pressure that puts the network on designated terrorist lists, and second, deceive the international community about its violent side. It attempts to give the impression that the main terrorist group, PKK does not use violence. Since its foundation, the organization has been operating with the names of "PKK," "Kongra/GEL," "KADEK," "HPG," "TAK," "KKK," and "PJAK (Iranian branch)."[130] TAK (*Teyrêbazên Azadiya Kurdistan*, Kurdistan Freedom Hawks in English), for example, engaged a bombing campaign in the big cities like Istanbul and recreation centers of coastal Turkey.[131] The first attack of TAK was on August 2004 and this date coincides with the announcement that PKK would begin its terrorism campaign again after five years of inaction, demonstrating that TAK is a subordinate group of PKK terror network directed by the organization's hierarchical leadership.

The fourth strategy of the terrorist network is its technological adaptation. PKK is, perhaps, the first terrorist network that has a private satellite TV by which they can mobilize people with extensive propaganda on a 24/7 basis. The Roj TV station, a television station of PKK, has been banned in the UK and France, but it is still broadcasting from Denmark, despite the Turkish Government's efforts to stop it.[132]

B. OPERATIONAL TRAINING IN PKK

The operational training is given to PKK recruits in the terrorist training camps in the north of Iraq specifically in Kandil Mountain, a 3,500 meters mountain that straddles along the Iranian Border of Iraq and is located 100 kilometers from the Turkish Border.

---

[129] Rosemarie Skaine, *Female suicide Bombers*, (North Caroline: McFarland Company Inc.), 2006 p. 84

[130] United States Department of State Office of the Coordinator for Counterterrorism, "Country Reports on Terrorism 2005" p.224 April 2006, available at http://www.mipt.org/pdf/Country-Reports-Terrorism-2005.pdf accessed 8 November 2006

[131] "Turkish resort blast kills five," BBC news, 16 July 2006, available at http://news.bbc.co.uk/2/hi/europe/4688575.stm accessed on 14 November 2006

[132]Sedat Laciner, "The West and Terrorism: PKK as A Privileged Terrorist Organization," Turkish Weekly, 14 May 2006 available at http://www.turkishweekly.net/editorial.php?id=29

On the southern flank of the mountain the PJAK, the Iranian branch of PKK is located. Communication is facilitated through short range radio devices according to James Brandon of the Jamestown Foundation.[133] He depicts the camp:

> PKK operates at Mount Qandil more as a mini-state rather than a simple "training camp." While weapons training does take place and forms an important part of training for new recruits, the PKK puts great emphasis on ideological training. Education in Kurdish history, culture and politics aims to create dedication to the Kurdish cause with loyalty to Abdullah Ocalan. At the same time, many PKK members are middle-aged and have been in the camp since 1999, or even earlier. The camp is purposely situated far from the frontlines and its primary role is to act as a safe haven for Turkish Kurds. The sense of lethargy that pervades the camp comes from the fact that the PKK's leader is still Abdullah Ocalan who, despite being in prison, aims to micromanage the movement.[134]

From the photographs that are posted on the PKK websites, it is seen that small arms training, guerilla tactics, and the ideological training constitutes most of the training program. In the PKK's main website (pkk.org), one of the trainers writes that their training program in the training camp includes self criticism of their past tactics, Ocalan's so called, "Democratic ecologic and gender free socialist paradigm," and alleges that this new paradigm is the only alternative against the hegemonic capitalist system.[135] The emphasis on the ideological training in the program demonstrates that their first priority is creating robust indoctrinated ideologically devoted terrorists and then giving operational skills to kill.

According to Brandon, Internet connection is available from a few computers through satellite uplinks in the camp. Satellite TV is not the only way they can make their propaganda, transmit their massages, mobilize their people and motivationally train and sustain the motivational commitment among its members. The Internet is largely used by PKK terrorist network for these purposes. As observed by, a political science professor at Concordia University "when Turkish forces arrested Ocalan, Kurds around the world responded with demonstrations within a matter of hours." He attributed the swift action in

---

[133] James Brandon, "Mount Qandil: A Safe Haven for Kurdish Militants – Part 1," *Terrorism Monitor*, 4, 18 September 2006

[134] Ibid.

[135] Roni Munzur, "What are the renevals in PKK's new training program and its effects?(translation from Turkish)," available at http://www.pkk.org/tr/Okuldosya/roni.html accessed on 10 November 2006

part to the Internet and web. "They responded more quickly than governments did to his arrest,"[136]The systematic use of internet by PKK for motivational training will be the main focus in rest of the chapter.

C.   MOTIVATIONAL TRAINING THROUGH NET

1.   Dataset

1	Web address	Language	Content	Links	Design
2	http://www.rojaciwan.com	Kurdish Turkish	Discussion Forum, News blog,	3,4,5,6,7,10,12,15,16,17,19,20,22,23,24,25,27,38	3
3	http://www.pkk.org	Turkish Kurdish Farsi English Arabic	Declarations, Party Programs, Leader Interviews	4,5,6,7,11,24	3
4	http://www.hpg-online.com	Kurdish Turkish Arabic German English	Declarations, Communiqués, Information about Security Force's Operations	2,3,5,6,11,26	3
5	http://www.pajk-online.com	Turkish	Terrorist Memoirs, Women Studies	2,3,4,6,7,8,10,14,15,16,17,20,23	3
6	http://www.kongra-gel.com	can not be reached	None	none	none
7	http://www.kurdishinfo.com	Turkish Kurdish English French German	Biased news blog	2,8,10,11,14,16,17,18,19,20,22,32,33	3
8	http://www.gundemimiz.com	Turkish	Biased news blog	9	3
9	http://www.cewlik.net	Turkish Kurdish	Discussion forums, Biased News blog	none	2
10	http://zaningeh.yxk-online.com	Turkish Kurdish German	Strategic analyses, Intellectual editorials	2,8,11,12,13,20	3
11	http://www.abdullah-ocalan.com	Turkish Kurdish Farsi Arabic Greek English Russian	Books, photos and life story of Ocalan	none	3
12	http://www.rojame.com	Turkish	News, discussion forums, latest Ocalan's acknowledgements	2,3,4,5,6,7,8,10,15,16,17,19,20,22,23,33,34	3

---

[136] Michael Dartnell, quoted in Dorothy Denning, "Activism, Hacktivism and Cyber Terrorism: Internet as a tool for influencing foreign policy," 2004, p.256, RAND monograph report available at http://www.rand.org/pubs/monograph_reports/MR1382/MR1382.ch8.pdf accessed on 10 November 2006

13	http://www.amigra.org	Turkish	culture literature and arts publication	8,10,15,16,17,22	2
14	http://www.denge-mezopotamya.com	Kurdish	Biased news	none	3
15	http://www.roj.tv	Turkish, Kurdish	TV channel's website	none	3
16	http://www.azadiyawelat.com	Kurdish	Online newspaper	none	3
17	http://www.firatnews.com	Turkish	Biased news agency	none	3
18	http://www.rojev.com	Kurdish	Biased news	none	3
19	http://www.dozame.org	English	Discussion forum	3,4,5,6,7,8,10,14,15,16,17,20,22,23,32,36,37,	3
20	http://www.yeniozgurpolitika.com/	Turkish	Biased news	none	3
21	http://www.urmiye.org	Turkish Farsi Kurdish Finnish Assyrian	Propaganda	2,3,4,5,6,7,8,10,11,15,22,23	2
22	http://www.diclehaber.com/	Turkish	Biased news agency	none	3
23	http://www.serxwebun.com	Turkish	Designated publication of PKK	none	1
24	http://www.pjak.com	Farsi	PKK's Iranian branch	none	2
25	http://www.emkine.dk	Turkish Kurdish	Biased news, Communiqués, operation news	2,3,4,5,6,7,10,17,29,30,	3
26	http://www.gerila-online.net	Turkish	Propaganda and Communiqués	2,3,4,5,10,12,15,16,17,24,28	3
27	http://www.sehid.com	Turkish	Biographies of dead terrorists	none	3
28	http://www.kon-kurd.org	Turkish Kurdish English French German	Designated website of confederation of Kurdish Associations	8,16,18,21	1
29	http://www.kurder.dk	Turkish Danish	Biased news	25	1
30	http://www.welatparez.com	Turkish	Site of a faction from PKK	none	3
31	http://www.kurdlander.com/kurd	Turkish Kurdish English Farsi Finnish Spanish	Propaganda, discussion forum	2,8,11,14,1516,17,18,19,22,23,25,35	3
32	http://www.freedom-for-ocalan.com	English Italian German	Site of an international campaign for freeing Ocalan	7,15,34,	2
33	http://www.flash-bulletin.de	Turkish	Biased news	none	2
34	http://www.hernepes.com	Kurdish	Discussion forum,	2,3,4,5,6,78,10,12,1	3

			Biased news	5,16,17,19,20,23,24,28,38	
35	http://www.cmg-team.com	Turkish Kurdish	Kurdish hacker group's site	none	2
36	http://rastibini.blogspot.com	English	Biased news blog	3,4,6,7,19,27,33,	3
37	http://www.nadir.org	German	Discussion forum	none	1
38	http://www.ciwanenazad.rojaciwan.com.	Turkish Kurdish	Online publication of PKK's youth branch	none	3

Table 2 List of PKK Websites

The first two columns are the URL of the websites with a number attached to it. The numbers left hand side of the URLs also represents the websites. The third column is the languages in which the websites are published. The forth column shows the main content of the web sites. The fifth column shows the links from this particular row's URL to the other sites. The sixth column shows the design quality of the websites in a three number scale. For example the website http://www.gundemimiz.com in the 8th row is being published in Turkish. It contains news sympathetic to the terrorist network and has a hyperlink to http://www.cewlik.net in the 9th row. It is professionally designed, has multimedia content and colorful view, thus it is graded 3 in terms of design quality.

2. Content Analysis of PKK Websites

The content of these 37 websites generally include: the history of the organization, biographies of its leaders and its killed terrorists, information on the political aims of the terrorist network, the maps of so-called free Kurdistan, an intensive informative campaign about the Kurdish ethnicity, history, language, and culture. They claim that Kurds are the oldest people of the region beginning from Sumerian era to create and enforce identity, based on ethnicity.

PKK websites avoid the organization's violent record and basically highlight positive issues like freedom of speech, democratization, ecology, and its imprisoned ringleader. They aim at Western audiences, who are sensitive to these norms in order to provoke sympathy in democratic societies.

The websites exaggerate the casualties of the security forces and hide their losses in order to encourage sympathizers, and make calls to the youngsters, not to sign up for the Turkish Armed Forces.

The main reason for publishing the sites in eight different languages, especially European languages, is to reach the second or third generation of ethnically Kurdish immigrants in these countries who can not speak either Kurdish or Turkish. Turkish is so popular because it is a common language even for the Kurdish speaking people who do not understand each other due to their dialect differences. Arabic and Farsi are used to reach the Kurdish population living in Syria and Iran.

The web site named "pajkonline.com" aims at the women who were mostly used in suicide bombings in the past. Abdullah Ocalan had urged his militants to imitate Hamas militants by becoming human bombs in 1996. 70% of the whole suicide bombings of the organization were carried out by the female militants[137]. The tribal (*ashiret* in Turkish) nature of the social structure in the region and its consequences (low education rates, early age marriages, polygamy, and honor killings) make the young female population very susceptible to ideological exploitation. The socialist ideology, which allegedly denies any dominant factor in the society including masculine dominancy, is used as an ideological message to attract this vulnerable group of people of the region. Almost every website in the dataset contains a part dedicated to women and the content of these pages is very fanatically feminist to a degree that one can conclude from these sites that PKK is a violent feminist organization. The Iranian branch of the PKK or PJAK is published only in Farsi and has no out links although it has three in links--one from the youth branch's web site, one is from PKK's own web site and one from the European branch's website.

Almost every page emphasizes that the PKK terrorist network will not accept any solution to the so-called Kurdish issue without their ringleader Abdullah Ocalan. Letters, written by the militants, praise him to a degree that one gets the impression that he is supernatural. His writings reinforce this supernaturalism too. He defines his capture as crucifixion, and claims that the alternative ideology that he brings--he names it Ecological Democratic Confederation--is superior to that of Durkheim, Marx and Lenin. Moreover he makes an analogy between his so-called universal struggle and that of a god from Greek mythology--Prometheus who took fire from the hearth of the gods by stealth

---

[137] Robert A. Pape, "Dying to Win: The Strategic Logic of the Suicide Terrorism," (New York: Random House, 2005) p. 208

and brought it to men, thus mankind was warm.[138] This situation was observed by Clara Beyler who comments on the female suicide bombings of PKK: "The incentive and justification for suicide attacks were all based on Ocalan's orders. The leader had such power and influence on the group's members, that they did not need the pretext of religion, for Ocalan himself reached the status of God in the terrorist network. It was on this god-like leader's orders that suicide bombings started. It was also on his command that they stopped."[139] The struggle of PKK seems to transform into a struggle for saving Abdullah Ocalan's skin rather than allegedly pursuing Kurdish rights.

A great majority of the web sites have multimedia content like videos, flash animations, audio, and colorful views. Some sites gives links to the popular new trends like Kurdish protest rock music, Kurdish hip hop and issues interviews with the popular bands and singers to attract the youth.

One of the web sites of the network secured with password, named "cmg-team.com" is dedicated to the cyber warfare and encourages the members to learn hacking techniques and provides information about the vulnerabilities of the computer operating systems, basic knowledge about hacking, computer security, and basic computer programming languages.

The website "zaningeh.yxk-online.com" serves as an intellectual base from which the organization issues its strategic assessments about the future of their cause. The website contains assessments of terrorist organizations (especially ETA and IRA), and derives lessons learned from struggle against their governments.

The critical information or what the site administrators think that it is critical information are not discussed nor allowed to appear in open channels. The message postings are not done instantly. First, messages are evaluated by the site administrators, and then those that are approved are posted on the site. When this author began his research and monitoring these sites, "sehid.com" in which the organization posts the killed terrorist biographies (almost updated) did not exist. Some users were asking questions about the situations of active members (generally if they are alive or not),

---

[138] Abdullah Ocalan, "Defense of Free Mankind" vol. 1 translation from Turkish available at www.abdullah-ocalan.com accessed on 12 July 2006

[139] Clara Beyler, "Messengers of Death: Female Suicide Bombers, international policy institute for Counter-Terrorism, February 12 2003, from http://www.ict.org.il/articles/articledet.cfm?articleid=470

especially after the clashes between security forces and PKK. This reveals that some of these sites are administered from the main camps of PKK. In these situations, site administrators warned the users that they must be aware that these sites are monitored by the Turkish Intelligence, and the administrators directed their users to instant messaging tools like msn messenger to communicate privately.

Some of the websites in the network are shut down by the court warrants due to their terrorist content or access to these sites are denied to the users in Turkey. In this situation, the other websites that are still active give instructions about how to view these sites by changing their proxy server and LAN settings or giving direct links to the mirror web pages of banned sites.

Content analyses reveal that PKK terrorist network uses the Internet for communicating with its target audience, be it government, its support base or international community. Although this author did not find any operational training material in these sites, they carry out a massive motivational training through the content.

D. NETWORK ANALYSIS OF PKK WEBSITES

1. Why Social Network Analysis

The Internet has become the main training environment as a result of counter terrorism efforts to destroy the land-based training camps. For further success, it is essential that the web presence of the terrorist networks be eliminated. The elimination strategy must be performed in a systematic way in order to prevent waste of time and workforce. Social network analyses can be utilized to identify which websites are essential for eliminating as a way to disrupt the whole network.

Network data are defined by actors and by relations (or "nodes" and "links"). Network analysis focuses on the relations among actors, and not individual actors and their attributes. This means that the actors are usually not sampled independently, as in many other kinds of studies (most typically, surveys). Often network data sets describe the nodes and relations among nodes for a single bounded population. PKK websites are the study's bounded population. The websites are the nodes and the hyperlinks between the websites are the links in our study. Because we analyzed the attributes of the nodes in content analyses, our focus in network analyses will be the relations among these websites.

Social network analysts use two kinds of tools from mathematics to represent information about patterns of ties among social actors: graphs and matrices. Network analysis uses (primarily) one kind of graphic display that consists of points (or nodes) to represent actors and lines (or links) to represent ties or relations. There are a number of software tools that are available for drawing graphs, and each has certain strengths and limitations. The author used UCINET and NetDraw version 4.14 to draw the map of the PKK websites.

Graphs are very useful ways of presenting information about social networks. However, when there are many actors and/or many kinds of relations, they can become so visually complicated that it is very difficult to see patterns. It is also possible to represent information about social networks in the form of matrices. Representing the information in this way also allows the application of mathematical and computer tools to summarize and find patterns. The UCINET provides these matrices and statistical analyses tools. Statistical analyses are used with the graphs, for better understanding of the PKK website network.

2.   Methodology

The first step of the study is constructing the dataset of the web sites. Beginning with the organizations designated web site (pkk.org), the author traced the hyperlinks that directed the users to other websites. The same procedure was followed for the each site. Thirty Seven different websites were identified that have links to "pkk.org." Some impartial links like mainstream media organizations like CNN, AFP or REUTERS or international organizations like Human Rights Watch or amnesty international were not included in the dataset.

The number of hits the web sites took daily basis are not included in the analysis because generally sympathizers artificially increase hit numbers by browsing the same sites multiple times. Although the official web page of Kongra-Gel--the same organization but with different name--has a lot of links from the other sites, the link is broken and the page is not currently being published. The same pages that are published with different names are not included in the dataset. From a basic search on a major search engine, one can find hundreds of personal web pages that are sympathetic to PKK and its cause. These pages also are not included in the dataset. Individual sympathizers

71

also use common video sharing sites like You Tube to post the propaganda videos. These sites have search option with key words. The PKK propaganda videos usually contains key words like '*gerilla*', '*pkk'*, '*Ocalan'*, and some popular Kurdish words to attract the sympathizers and misinform the web surfers who have nothing to the with the terrorist network's cause.

The second step is the visual and statistical social network analyses of PKK linked web pages using network analyses metrics. Instead of analyzing the network according to all the metrics, centrality, density and connectivity degrees are analyzed to identify influential websites and to overview the whole network. The Ucinet® software and analyses tools are used to map the network.

3. Centrality Analyses
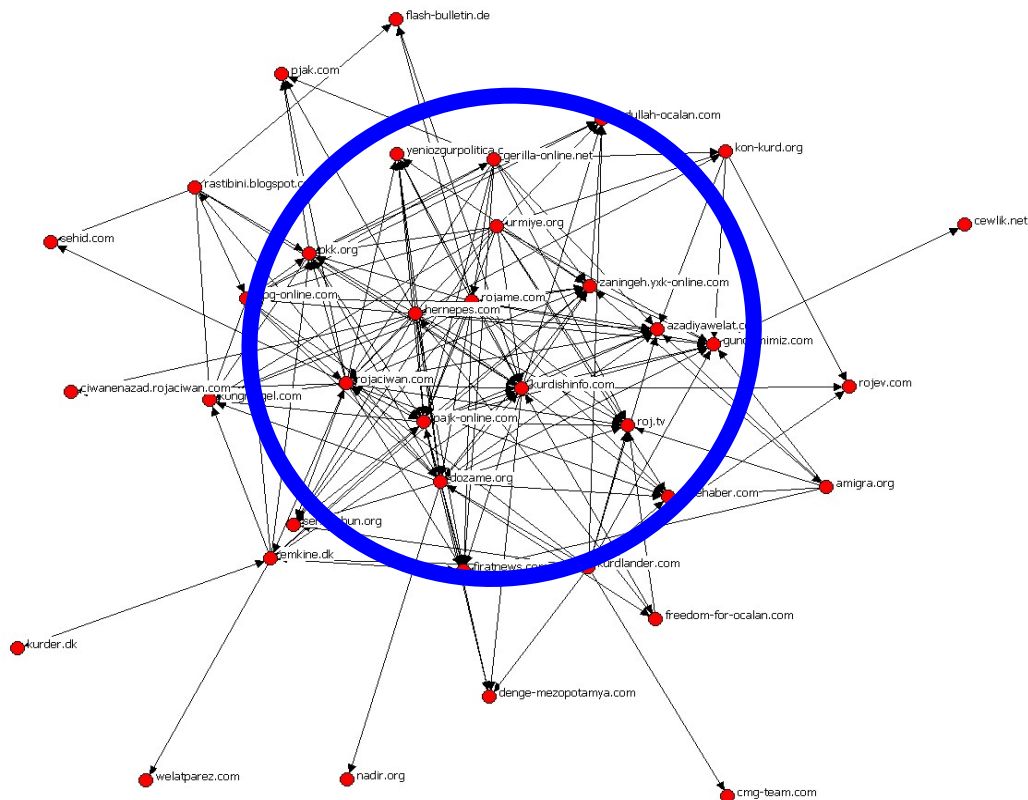
Figure 7 Multi-Dimensional Scaling Graph of PKK Website Network

72

The first visual graph of PKK website network is obtained using MDS. MDS is a family of techniques used (in social network analysis) to assign locations to nodes in multi-dimensional space (in the case of the drawing, a 2-dimensional space) such that nodes that are "more similar" are closer together.[140] This similarity is based on the number of ties or connections that the nodes have. The Web Sites located in the center are also the influential sites in the network. If an actor receives many ties, they are often said to be *prominent*, or to have high *prestige*. That is, many other actors seek to direct ties to them, and this may indicate their importance. Actors who have unusually high out-degree are actors who are able to exchange with many others, or make many others aware of their views. Actors who display high out-degree centrality are often said to be *influential* actors. "Freeman Centrality Measures" reveals this situation statistically and gives the influential web sites in descending order.

	1	2	3	4
	OutDegree	InDegree	NrmOutDeg	NrmInDeg
1 rojaciwan.com	18	10	50	27.778
33 hernepes.com	18	2	50	5.556
18 dozame.org	17	6	47.222	16.667
11 rojame.com	17	4	47.222	11.111
30 kurdlander.com	13	0	36.111	0
4 pajk-online.com	13	9	36.111	25
6 kurdishinfo.com	13	10	36.111	27.778
20 urmiye.org	12	1	33.333	2.778
25 gerilla-online.net	11	1	30.556	2.778
24 emkine.dk	10	3	27.778	8.333
35 rastibini.blogspot.com	7	1	19.444	2.778
9 zaningeh.yxk-online.com	6	10	16.667	27.778
12 amigra.org	6	1	16.667	2.778
3 hpg-online.com	6	10	16.667	27.778
2 pkk.org	6	10	16.667	27.778
27 kon-kurd.org	4	2	11.111	5.556
31 freedom-for-ocalan.com	3	2	8.333	5.556
28 kurder.dk	1	1	2.778	2.778
7 gundemimiz.com	1	10	2.778	27.778
5 kongra-gel.com	0	10	0	27.778
8 cewlik.net	0	1	0	2.778
14 roj.tv	0	10	0	27.778
19 yeniozgurpolitica.com	0	7	0	19.444

[140] Robert A. Hanneman and Mark Riddle, "Introduction to Social Network Methods (Riverside, CA: University of California,2005), available at http://faculty.ucr.edu/~hanneman/nettext/ accessed on 12 November 2006

22 serxwebun.org	0	7	0	19.444
16 firatnews.com	0	10	0	27.778
26 sehid.com	0	2	0	5.556
23 pjak.com	0	4	0	11.111
10 abdullah-ocalan.com	0	6	0	16.667
29 welatparez.com	0	1	0	2.778
21 diclehaber.com	0	7	0	19.444
13 denge-mezopotamya.com	0	4	0	11.111
32 flash-bulletin.de	0	3	0	8.333
15 azadiyawelat.com	0	10	0	27.778
34 cmg-team.com	0	1	0	2.778
17 rojev.com	0	3	0	8.333
36 nadir.org	0	1	0	2.778
37 ciwanenazad.rojaciwan.com	0	2	0	5.556

Table 3 Freeman Centrality Measures of the PKK Website Network

The websites located on the top of the table are more influential websites as they have more in and out links. This can be observed from the visual graph of the network. The sites close to the right hand side in the graph are more influential ones.

74
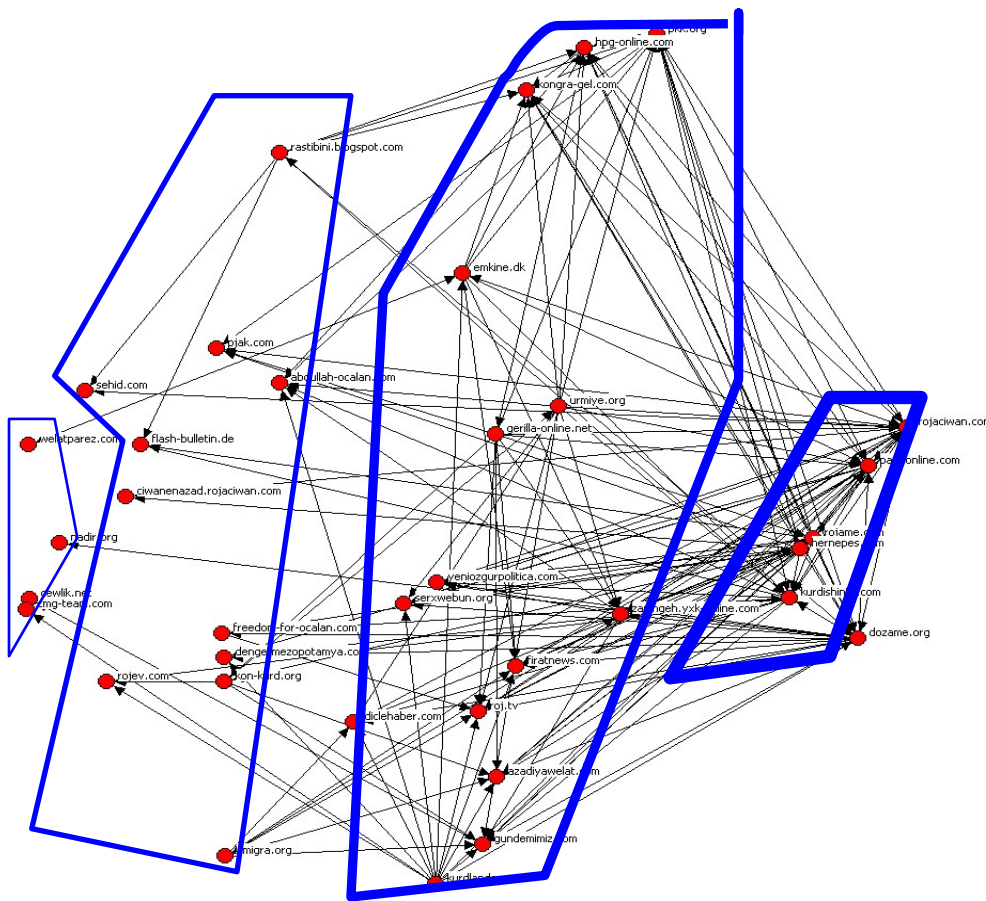
Figure 8 Principal Components Graph of the PKK Website Network

Centrality of the websites is important because it identifies the influential websites in the network. In addition, identifying influential websites will give us data to predict the future structure of the larger network. Even our small sample demonstrates the principals of "scale free networks." In "scale free networks" although most actors have only a few links to others, a handful of actors (hubs) have enormous amounts of connections.[141] The prospected new websites (nodes) are going to create a link to these influential networks to increase their popularity and people will exercise and reinforce bias toward the old influential nodes by observing the increasing incoming links to these sites. Albert Laszlo Barabasi and Eric Bonabeau explain this tendency: "as new nodes appear, they tend to connect to the more connected sites, and these popular locations thus

---

[141] Albert Laszlo Barabasi and Eric Bonabeau, "Scale Free Networks*" Scientific American*, May 2003 p. 64

acquire more links over time their less connected neighbors. This "rich gets richer" process will generally favor the early nodes, which are more likely to eventually become hubs."[142]

Reliance on the certain hubs in the network seems to be an advantage for PKK to disseminate its propaganda quickly by means of controlled popular hubs, but also it is terrorist network's vulnerability. Taking out these hubs will make rest of the network individual islands that have no connection to the others. The question in terms of counter terrorism agencies is how many of these hubs have to be taken down to crash the whole network. The recent research suggests that, generally speaking, the simultaneous elimination of as few as 5 to 15 percent of all hubs can crash the subsystem eventually the whole terrorist system.[143]

4.   Density and Geodesic Distances Analyses

The density measures of the network are somewhat loose. The density ratios are as follows:

Density (matrix average) = 0.1366

Standard deviation = 0.3435

These values mean that the network has only 13% of the all possible ties. This stems from a deliberate strategy of PKK. Some web pages, especially newspapers and the web page of its television channel and news agencies of the organization, do not have any outer connections to the other main sites of the organization. This situation creates an impression that newspapers and the news agencies that disseminate news to the world are impartial, because, simply, they do not have any links to PKK sites.

The geodesic metrics are useful for describing the minimum distance between actors in the network. The web page network of PKK has maximum value of 4 in terms of geodesic distances; any content published in one of the sites can be reached only maximum four clicks on the hyperlinks. This suggests that information may travel pretty quickly in this network.

---

[142] Barabasi and Bonabeau, p.65

[143] Ibid. p.66

5.   Connectivity Analyses

Point Connectivity calculates the number of nodes that would have to be removed in order for one actor to no longer be able to reach another. If there are many different pathways that connect two actors, they have high "connectivity" in the sense that there are multiple ways for a signal to reach from one to the other. The website network of PKK is very robust in terms of point connectivity. The most influential sites have higher point connectivity which makes it difficult to deny internet users to reach these influential sites. The sites that have the highest connectivity are rojaciwan.com (10), rojame.com (10), dozame.org (10), gerilla-online.net (10), hernepes.com (10), urmiye.org (10), and pajk.com (9) respectively.
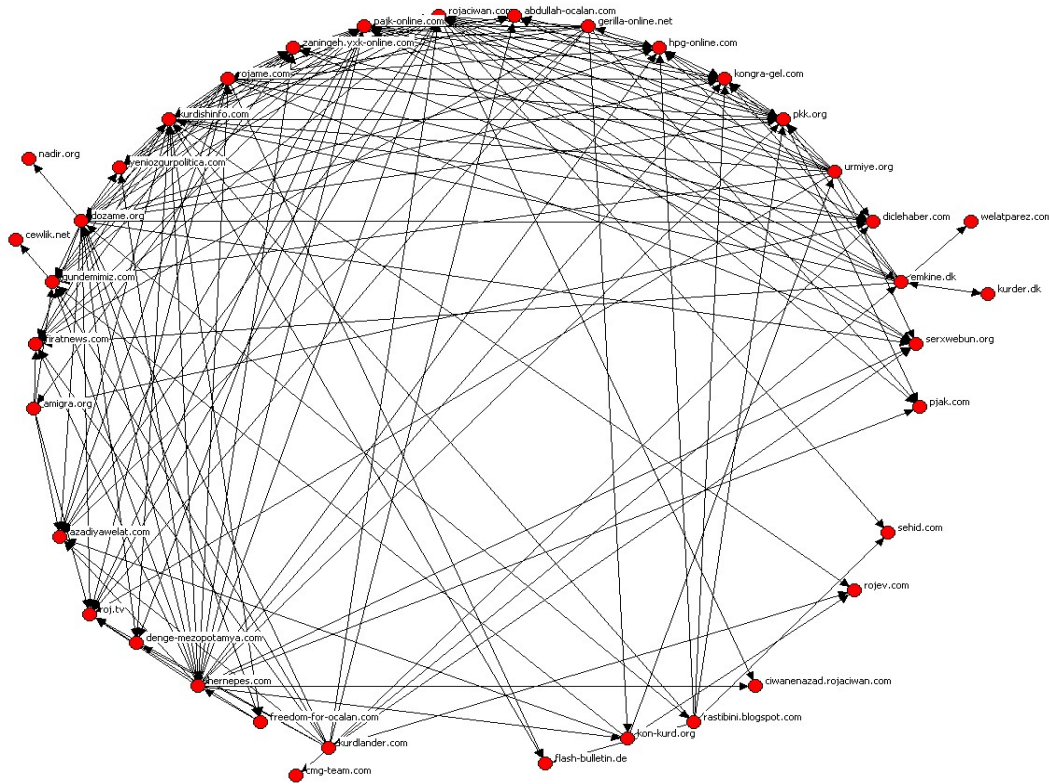
Figure 9 Circular Layout Graph of the PKK Website Network

The *circular layout* graph is a good illustration of networks closed nature in systems terms. This can be observed from the centrality- degree values of the network. The network has 18 zero out-degree values as opposed to only one zero in in-degree values which is the indicator of closed nature of the network to its environment. Only one website, "flash-bulletin.de" has a links to the outer world that has different view other

than that of the organization. This web site has links to the mainstream news media like CNN and AFP. When you enter the network the links directs you to the news that PKK wants you to read, the music that PKK wants you to listen, the images that PKK wants you to view. The only different point of view comes from welatparez.com which has the same cause, that is, to build a free Kurdistan including Turkish territory publishing from Denmark, but criticizes the internal affairs of the organization. The propaganda made in the network of the websites of the PKK is enough to demonize Turkey and the Turks and to create sense of us versus them on the ethnic nationalist basis.

E.   CONCLUSION

The content and the network analyses of the PKK linked websites is a good illustration of how modern terrorist systems use technology to their own benefit. According to Gabriel Weimann there were 4,300 terrorist websites on the Net in 2005 and probably more than that today[144]. They use the Net basically as a communication tool among other various purposes. The Internet is not only a platform for the likeminded terrorists to meet and communicate, but also a weapon to attack basic information structures of their superior enemies on the Net.

The Website network of PKK is designed in such a way that when a neutral internet surfer enters the network, he or she is indoctrinated according to PKK's ideology and looks at the world from the terrorists' perspective. The network is robust in terms of inter-connectivity but vulnerable to coordinated attacks as are all the "small world" networks.[145] In order to disrupt the whole network of terrorist websites the most influential sites (hubs) that almost all the information radiates from must be given priority. Eliminating these hubs will leave the other nodes as individual islands which are not so influential.

The loosely controlled nature of Net provides new opportunities for terrorist organizations. The differences between countries about defining terrorism make the situation more complicated to act in concert against terrorism. Terrorist organizations, no matter what their ideological bases, are exploiting this situation and using Net as new safe haven for their various activities.

---

[144] Gabriel Weimann, p. 5

[145]Barabasi and Bonabeau, p.65

VI. CONCLUSION

A. KEY POINTS

The study began by using a system's approach to define the overall system of terrorism. It then focused on the training subsystem as a critical point of intervention for interdiction. The training subsystem is considered to be the most important component of the terrorist systems for various reasons:

- The training subsystem is the main energy provider to the terrorist system through its recruitment component.

- Training subsystem is the facilitator of the competency in the whole system at individual and systems levels by acquiring the strategic knowledge, distributing it through the system and enabling the system learn to adapt to its hostile environment.

- Training subsystem includes the ideology (mainly what is thought in training) which operates as a regulator (cybernetics) through feedback mechanisms.

The counter terrorism strategies of most countries today are focused on killing, capturing or deterring terrorism. The success of this type of approach is measured in the numbers of dead bodies of terrorists, the number of prisoners in detainee centers or the number of terrorist plots prevented. However, the yardstick for evaluating a counter terrorism strategy should be the difference the strategy makes between the number of current and prospected terrorists. If the grand strategy decreases the number of future terrorists, than it could be said to be effective. The ideal would be to prevent the number of terrorists from increasing. Disrupting the training subsystem is one of the proactive strategies to counter the terrorism by stopping or eliminating the terrorist recruiting system.

As discussed throughout the study, organizations try to keep their recruitment channels open by means of intensive motivational training. First they create the sense of "us versus them" through motivational training, and then try to harm "them" by violence through operational training. According to Jerrold Post, "terrorism at heart is a vicious

79

species of psychological warfare, it is violence as communication. Smart bombs and missiles will not win this war. The only way to counter psychological warfare is with psychological warfare."[146]

Smart bombs and missiles are also necessary but not adequate for fighting terrorist systems. Coercive instruments are the only means that governments have for making terrorism costly. Tracing, finding and eliminating geographical terrorist training camps are necessary, but this elimination strategy should not stop there. It should include wiping out the web presence of the terrorist systems, because they have moved their geographical training camps to the information highway where they enjoy the anonymity that the Internet provides.

Social network analyses techniques can be used to map the Internet-based infrastructure of terrorist systems. Social network analysis helps to identify the central sites of terrorist networks. Influential websites should have the first priority in an elimination strategy, because the other sites simply imitate or use these influential websites as their main source. This does not necessarily require an extensive censorship that would create more problems than it solves. A selective elimination strategy that would include the internet users who are interested in the terrorism should be tried. Community policing the internet would enhance the sense of ownership among the responsible internet users. There are some hacker groups who do it now, as individuals. But to be effective these efforts must be coordinated. There has to be a central site where people can go to inform about terrorist content and an implementation group that has the technical expertise to disrupt such systems.

The website network of the terrorist organization PKK is analyzed as a case study and its influential websites are identified using social network analyses tools. The case study demonstrates how a modern terrorist system uses the internet for motivational training of its current and prospected militants and how its presence could be reduced even eliminated using social network analyses. In this case study, there were three steps in the elimination strategy. The first step was to collect data for constructing a dataset of the terrorist websites—and suggested that community policing the internet can enhance the effectiveness of this step. The second step was to map them to determine the overall

---

[146] Jerold Post, "Psychological Operations: A Critical Weapon in Countering Terrorism" cited in Gabriel Weimann, 2006, Terror on the Internet, (Washington D.C.: United States Institute of Peace Press)

network structure. The third step was to identify the key websites that could be eliminated. The next steps would be to disrupt these website networks or deny internet users to be able to reach these sites. The future steps in the elimination strategy have technical, social, and political aspects, all of which are different research topics. However it is obvious that we need international collaboration. Terrorist networks publish their websites from almost every country that has web hosting providers. Terrorist networks can move their sites if they are banned in one country. To be effective, the elimination strategy needs to be comprehensive.

B. SUMMARY OF RECOMMENDATIONS

1. Continue to eliminate the geographical terrorist training camps.

2. Use social network analysis to identify and eliminate the virtual training camps in a systematic way.

3. Clear internet of hatred fuelling content.

4. Be aware of the potential use of peer-to-peer internet networks for terrorist purposes and prepare to counter it.

5. Invite the public to participate in the elimination process, and encourage community policing among the internet users.

6. Focus on countering the terrorist doctrine instead of struggling with the indoctrinated terrorists.

7. Foster international cooperation against motivational and operational training on the net.

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF REFERENCES

Aktan, Gunduz and Ali Koknar. "Turkey" in *Combating Terrorism: Strategies of Ten Countries* ed. Yonah Alexander (New Delhi: Manas, 2005)

Al-Salmani, Abu Mohammed. Audio tape release script "The Camp of the Al-Ansaar Fighters in the land of Mesopotamia" May 7, 2006, available at http://www.globalterroralert.com/pdf/0506/rawacamp0506.pdf accessed on 10 October 2006.

Anderson,Virginia, and Lauren Johnson. *Systems Thinking Basics*, (Massachusetts: Pegasus Communications Inc., 1997)

"Anti-Terror Law No 3713," Official Gazette, No 20843 vol. 30, 12 April 1991, cited in Beril Dedeoglu, "Bermuda Triangle: Comparing Official Definitions of Terrorist Activity," *Terrorism and Political Violence*, 15, 2004

Arquilla, John and David Ronfeldt. "Networks and Netwars: The Future of Terror, Crime, and Militancy," *Rand Monograph*, available at http://www.rand.org/pubs/monograph_reports/MR1382/index.html accessed on 10 October 2006

Arquilla, John. Class Lecture of "Conflicts in the Information Age" at Naval Postgraduate School October 2005

Bandura, Albert. "Mechanisms of Moral Disengagement" in *Origins of Terrorism* ed. Walter Reich (Washington D.C.: Woodrow Wilson Center Press, 1998)

Barabasi, Albert Laszlo, and Eric Bonabeau "Scale Free Networks*" Scientific American*, May 2003

Beer, Ann Low. "Politics, School Textbooks and Cultural Identity: the Struggle in Bosnia and Herzegovina," *Paradigm* Vol. 2 July 2001 available at http://faculty.ed.uiuc.edu/westbury/Paradigm/LOW-BEER.PDF accessed on 12 October 2006

Beyler, Clara. "Messengers of Death: Female Suicide Bombers," International Policy Institute for Counter-Terrorism, February 12, 2003, available at http://www.ict.org.il/articles/articledet.cfm?articleid=470 accessed on 12 October 2006

Bloom, Mia. *Dying to Kill: the Allure of Suicide Terror*, (New York: Columbia Uni. Press, 2005)

Brandon, James. "Mount Qandil: A Safe Haven for Kurdish Militants – Part 1," *Terrorism Monitor*, 4, 18 September 2006

Brynjar, Lia and Thomas Heghammer. "Jihadi Strategic Studies: Alleged Al Qaeda Policy Study Preceding the Madrid Bombings," *Studies in Conflict & Terrorism*, 27, 2004

Burdman, Daphne. "Education, indoctrination, and Incitement: Palestinian Children on Their Way to Martyrdom," *Terrorism and Political Violence*, 15, spring 2003

Burke, Jason. *Al Qaeda: True Story of Radical Islam*, (London: Penguin Books, 2004)

Center for Religious Freedom of Freedom House, "Saudi Arabia's Curriculum of Intolerance with Excerpts from Saudi Ministry of Education Textbooks for Islamic Studies," 2006 available at http://www.freedomhouse.org/religion/pdfdocs/KSAtextbooks06.pdf accessed on 16 October 2006

"Characteristics of the Republic," Turkish Constitution article 2, available at http://www.tbmm.gov.tr/english/constitution.htm accessed 15 October 2006

Chenoweth, Erica. "Instability and Opportunity: The Origins of Terrorism in Weak and Failed States" in *The Making of a Terrorist vol.3 Root Causes*, ed. James J. F Forest, (Westport CT: Greenwood Publishing Group, 2006)

Conklin, Jeff. "Wicked Problems and the Social Complexity," available at http://cognexus.org/wpf/wickedproblems.pdf accessed on 12 October 2006

Country Reports on Terrorism: East Asia and Pacific, China" available at http://www.state.gov/s/ct/rls/crt/2005/64336.htm accessed on 13 July 2005.

Daft, Richard L. *Organization Theory and Design* (Mason, OH: Thomson South Western, 2004)

Denning, Dorothy. "Activism, Hacktivism, and Cyberterrorism: The Internet as a Tool for Influencing Foreign Policy," *Rand Monograph*, available at http://www.rand.org/pubs/monograph_reports/MR1382/MR1382.ch8.pdf reached 10 October 2006

Dobson, C. and R. Payne. "Counterattack: The West's Battle against the Terrorists," (New York: Facts on File Inc., 1982)

Fadlallah, Sayyid Mohammad. Quoted in Martin Kramer, "the Moral Logic of Hezbollah" in *Origins of Terrorism* ed. Walter Reich (Washington D.C.: Woodrow Wilson Center Press, 1998)

Fair, Christine. "Militant Recruitment in Pakistan," *Studies in Conflict & Terrorism*, 2004, vol. 27, p.489-504

Forest, James, J. F. "Training Camps and Other Centers of Learning" in *Teaching Terror,* ed. James J. F. Forest (New York, Rowman and Littlefield Publishers Inc., 2006)

Gause III, F. Gregory. Can Democracy Stop Terrorism? *Foreign Affairs*,
        September/October 2005

Goodenough, Patrick . "Can Terrorists be reprogrammed?" CNS news, March 10, 2006,
        available at
        http://www.cnsnews.com/news/viewstory.asp?Page=%5CForeignBureaus%5Carc
        hive%5C200603%5CFOR20060310b.html accessed on 18 October 2006

Green Book 1 available at http://www.residentgroups.fsnet.co.uk/greenbook.htm
        accessed on 10 October 2006

Grossman, Dave. *On Killing: The Psychological Cost of Learning to Kill in War and
        Society*, (New York: Little Brown Company, 2004)

Gunaratna, Rohan. *Inside Al Qaeda*, (New York Berkley Books, 2003)

Gurr, Ted Robert. *Why Men Rebel* (Princeton NJ: Princeton University Press, 1970)

Hanneman, Robert A., and Mark Riddle. Introduction to Social Network
        Methods, (Riverside, CA: University of California, 2005), available at
        http://faculty.ucr.edu/~hanneman/nettext/ accessed on 12 November 2006

Harrison, Michael I. and Arie Shirom, *Organizational Diagnosis and Assessment:
        Bridging Theory and Practice,* (Thousand Oaks, CA Sage Publications, 1999)

Hoffman, Bruce and Gordon McCormick. "Terrorism, Signaling and Suicide Attack,"
        Studies in Conflict and Terrorism, 2004, 27, p.243-281

Hoffman, Bruce. "Redefining Counterterrorism: The Terrorist Leaders as CEO," Rand
        review available at
        http://www.rand.org/publications/randreview/issues/spring2004/ceo.html
        accessed on 11 October 2006

Hoffmann, Bruce. "Is Europe Soft on Terrorism," *Foreign Policy*, summer 1999

Hoffmann, Bruce. "Use of Internet by Islamist Extremists," available at
        http://www.rand.org/pubs/testimonies/2006/RAND_CT262-1.pdf accessed on 12
        October 2006

Hyland, Francis P. *Armenian Terrorism: The Past the Present, the Prospects*, (San
        Francisco: West view Press, 1991)

"Internet Usage Statistics-The Big Picture World Internet Users and Population Stats"
        available at http://www.internetworldstats.com/stats.htm accessed on 17 October
        2006

"Iraqi Woman Confesses to Role in Jordan blasts," *Associated Press*, November 13 2005
        available at http://www.msnbc.msn.com/id/9979747/ accessed 20 June 2006

"Is Killing Jewish Women and Children Forbidden?," *Al-Watan,Kuwait*, August 31, 2001, cited in Yael Shahar, "Islamic Justification of Killing Non-combatants in War," 12 September 2001, available at http://www.ict.org.il/articles/articledet.cfm?articleid=379 accessed on 10 November 2006

Isomaki, Markus. "Peer to Peer Communication services in the Internet," in Peer to Peer and SPAM in the Internet, Report based a Licentiate Seminar on Networking Technology ed. Raimo Cantola, (Helsinki University of Technology, Fall 2003)

Johnsen, Gregory. "Yemen's Passive Role in the War on Terrorism," *Terrorism Monitor*, 4, February 23, 2006, available at http://jamestown.org/terrorism/news/article.php?articleid=2369911 accessed on 8 October 2006

Kressel, Neil J. "Why People Fallowed Hitler?" in *Mass Hate: the Global Rise of Genocide and Terror* (New York: Plennium Press),

Kruger Alan B. and Jetka Maleckova. "Poverty, Education and Terrorism: Is there a Causal Connection?" *Journal of Economic Perspectives*, 17, fall 2003, 119-144 Quoted in Yonatan Levy, "9/11 Report: The Middle East Dimension," available at http://www.washingtoninstitute.org/distribution/Pol890.doc accessed 13 September 2006

Laciner, Sedat. "The West and Terrorism: PKK as A Privileged Terrorist Organization," Turkish Weekly, 14 May 2006 available at http://www.turkishweekly.net/editorial.php?id=29 accessed on 10 November 2006

Marighella, Carlos "Technical Preparation of the Urban Guerrilla" in *Mini Manual of Urban Guerrilla*, available at http://www.marxists.org/archive/marighella-carlos/1969/06/minimanual-urban-guerrilla/ch04.htm accessed on 10 November,2006 accessed on 21 October 2006

Marighella, Carlos. *Mini Manual of the Urban Guerrilla*, 1969, available at http://www.Baadermeinhof.com/students/resources/print/minimanual/manualtext.html accessed on 10 October 2006

Martin, Lenore G. "*Turkey's Iraq Problem*," Washington Post, September 16, 2006; A21

Meinhof, Ulrike. "The Concept Urban Guerrilla," 1971,available at http://www.baader-meinhof.com/students/resources/communique/engconcept.html accessed on 1 November 2006

Merrari, Ariel. and Friedland cited in Maxwell Taylor, *The Terrorist*, (New York: Brassey's Defense Publishers, 1988)

Military Studies in the Jihad against Tyrants ed. Jerold M. Post, (USAF Counter-
      proliferation Center Maxell Air Force Base, Alabama, 2005)

Moghaddam, Fathali M. "The Staircase to Terrorism A Psychological Exploration,"
      American Psychologist, February- March 2005,

Mousseau, Michael. "The Nexus of Market Society, Liberal Preferences, and Democratic
      Peace: Interdisciplinary Theory and Evidence," *International Studies Quarterly*,
      47, December 2003

Munzur, Roni. "What are the renevals in PKK's new training program and its
      effects?(translation from Turkish)," available at
      http://www.pkk.org/tr/Okuldosya/roni.html accessed on 10 November 2006

National Commission on Terror Attacks, "The 9/11 Commission Report: Final Report of
      the National Commission on Terrorist Attacks upon the United States," (New
      York: W.W. Norton, 2004)

Nieminen, Klaus. "Legal issues in P2P systems," in *Peer to Peer and SPAM in the
      Internet, Report based a Licentiate Seminar on Networking Technology,* ed.
      Raimo Cantola,   (Helsinki University of Technology, 2003)

Ocalan, Abdullah. "Defense of Free Man" vol. 1 translation from Turkish available at
      www.abdullah-ocalan.com accessed on 12 July 2006

Pape, Robert A. *Dying to Win: Thee Strategic Logic of Suicide Terrorism*, (New York:
      Random House, 2005)

Parachini, John V. "The making of Aum Shinrikyo's Chemical Weapons Program," in
      The Making of a Terrorist vol. 2 Training ed. James F. Forest (Westport, CT:
      Greenwood Publishing Group, 2006)

Pipes, Daniel. "God and Mammon: Does Poverty Cause Militant Islam*?" National
      Interest*, 66, Winter 2001/2002

Podeh, Elie. "History and Memory in the Israeli Educational System: The Portrayal of the
      Arab –Israeli Conflict in History Textbooks (1948-2000)," *History and Memory*
      vol. 12, 2000

Post, Jerold M. "Psychological Operations: A Critical Weapon in Countering Terrorism"
      cited in Gabriel Weimann, 2006, Terror on the Internet, (Washington D.C.:
      United States Institute of Peace Press)

Post, Jerold, M. "Terrorist Psycho-logic in *Origins of Terrorism*, ed. Walter Reich,
      (Washington D.C.: Woodrow Wilson Center Press, 1998)

Ralston, Joseph . "Live CNN Turk Interview with General Joseph Ralston , Special U.S. Envoy for Countering the PKK and General Edip Baser, Special Turkish Envoy for Countering the PKK," available at http://ankara.usembassy.gov/statement_101906b.html accessed 8 November 2006

Rissen, John, and Tim Moors. September 2004, "Survey of Research towards the Robust Peer to Peer Networks" available at http://www.cs.umd.edu/projects/p2prg/p2p-overview.pdf accessed on 1 November 2006

Rittel, Horst, and Melvin Weber. "Dilemmas in General Theory of Planning," *Policy Sciences,* 4 (Amsterdam: Elsevier Scientific Publishing, 1973)

Robbins, Thomas and Dick Anthony. "Deprogramming, Brainwashing and the Medicalization of Religious Deviant Groups," *Social Problems,* 29 February 1982

Roberts, Nancy. "Coping with the wicked problems," class lecture at the NPS October 2006

Rumi, Jalal al-Din. translated by A.J. Arberry, Tales from Masnavi, available at http://www.khamush.com/tales_from_masnavi.htm#The%20Elephant accessed on 16 September 2006 "Bomb Blast kill seven, wounds 17 in Turkey," Reuters, 12 September 2006, available at http://go.reuters.com/newsArticle.jhtml?type=worldNews&storyID=13467062&src=rss/worldNews

Rumsfeld, Donald. "Speech to Council on Foreign Relations" available at http://www.defenselink.mil/speeches/2006/sp20060217-12574.html accessed on 10 October 2006

Sageman, Marc. *Understanding Terror Networks*, (Philadelphia: University of Pennsylvania Press, 2004)

Saper, Bernard. "On Learning Terrorism," *Terrorism* ,11, 1988

Schmid, Alex P. "Five Frameworks for Conceptualizing the Terrorism," *Terrorism and Political Violence* 16 (2006): 197-221

Schmid, Alex P. and Albert Jongman. *Political Terrorism: a new guide to actors, authors, concepts, data bases, theories, & literature* (New Jersey: Transaction Publishers, 2005)

Sheflin, Alan, and Edward Upton. *Mind Manipulators*, (New York: Paddington, 1978),

Singer**,** Margaret. **"**How the United States Marine Corps Differs from Cults" available at http://www.csj.org/studyindex/studycult/study_marine.htm accessed on 10 June 2006

SITE institute, "Al Battar Issue No. 13," July 23 2004, available at http://siteinstitute.org/bin/articles.cgi?ID=publications5404&Category=publications&Subcategory=0 accessed on 13 October 2006

SITE institute, "Jihad Registration Message posted on the internet" March 17 2005 available at http://siteinstitute.org/bin/articles.cgi?ID=publications27405&Category=publications&Subcategory=0 accessed on 24 October 2006

SITE institute, "Kidnapping the Focus of Al Battar Issue No. 10" 27 May 2004, available at http://siteinstitute.org/bin/articles.cgi?ID=publications3804&Category=publications&Subcategory=0 accessed on 27 0ctober 2006

SITE institute, "Samples of Militant Manuals Found on Jihadist Websites and Forums," available at http://www.siteinstitute.org/ accessed on 13 October 2006

Skaine, Rosemarie. *Female suicide Bombers*, (North Caroline: McFarland Company Inc.), 2006 p 84

Sprinzak, Ehud. "The Psycho-political Formation of Extreme Left Terrorism in a democracy: The case of Weatherman," *in Origins of Terrorism* ed. Walter Reich, (Washington D.C.: Woodrow Wilson Center Press, 1998)

Stahelski, Anthony. "Terrorists Are Made, Not Born: Creating Terrorists Using Social Psychological Conditioning*," Journal of Homeland Security*, March 2004, available at http://www.homelandsecurity.org/newjournal/Articles/displayArticle2.asp?article=109 accessed on 6 November 2006

*"State of Fear: Peru's Comisión de la Verdad y Reconciliación***,"** DVD, New Day Films, 2004

Taarnby, Michael. "Yemen's Committee for Dialogue: Can Jihadists Return to Society?" *Terrorism Monitor,* 3, July 15, 2005, available at http://jamestown.org/terrorism/news/article.php?articleid=2369745 accessed on 19 October 2006

The Middle East Media Research Institute, "Interview with the Hamas Commander of the Al-Qassam Brigades," July 24 2002, available at http://www.memri.org/bin/articles.cgi?Page=archives&Area=sd&ID=SP40302 accessed on 1 November 2006

"The seventh issue of the al-Qaeda publication focuses on choosing targets to attack in cities," available at http://www.rand.org/research_areas/terrorism/database/statements/2004/07/14/al_battar_training_camp_issue_7_jamestown_foundation_translatio.html accessed on 27 October 2006

Tremlet, Gilles. "We Bombed Madrid, says Al Qaeda Tape," 14 March 2004, *Observer Guardian* available at http://observer.guardian.co.uk/waronterrorism/story/0,,1169143,00.html accessed on 21 October 2006

Troy, Thomas S. *Warlords Rising*, (New York: Lexington Books, 2005)

Trujillo, Horacio R., and Brian A. Jackson. "Organizational Learning and Terrorist Groups," in *Teaching Terrorism* ed. James JF Forest, (Lanham MD: Rowman & Littlefield Publishers, 2006)

"Turkish resort blast kills five," BBC news, 16 July 2006, available at http://news.bbc.co.uk/2/hi/europe/4688575.stm accessed on 14 November 2006

Ulph, Stephen. "Internet Mujahedeen React to Rumsfeld's Recent CFR Speech," *Terrorism Focus*, vol.3 Issue 7, 21 February 2006, available at http://Jamestown.org/terrorism/news/article.php?articleid=2369904 accessed on 14 October 2006

United States Department of State Office of the Coordinator for Counterterrorism, "*Country Reports on Terrorism 2005*" April 2006, available at http://www.mipt.org/pdf/Country-Reports-Terrorism-2005.pdf accessed 8 November 2006

Venzke, Ben. "Al-Qaeda Targeting Guidance," Intel center, 2004, available at http://www.asisonline.org/newsroom/aq.pdf accessed on 1 November 2006

Weimann, Gabriel, *Terror on the Internet: The New Arena, the New Challenges* (Washington, D.C.: the U.S. Institute of Peace, 2006),

White House, "America's National Strategy for Combating Terrorism," September 2006 available at http://www.state.gov/s/ct/rls/wh/71803.htm accessed on 10 November 2006

White House, "The National Security Strategy 2002," p.5 available at http://www.whitehouse.gov/nsc/nss/2002/nss3.html accessed 18 October 2006

White House, 2003, "Progress report on the Global War on Terrorism." available at http://www.state.gov/documents/organization/24268.pdf accessed on 16 October 2006

Xinyuan Wang., *Tracking Anonymous Peer to Peer VoIP Calls on the Internet*, (Alexandria, Virginia, 2005)

INITIAL DISTRIBUTION LIST

1. Defense Technical Information Center
   Ft. Belvoir, Virginia

2. Dudley Knox Library
   Naval Postgraduate School
   Monterey, California

3. Center Of Excellence Defense against Terrorism
   Ankara, Turkey

4. Institute of Defense Sciences
   Turkish Military Academy,
   Ankara, Turkey